This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

No. .....

BOSTON
MEDICAL LIBRARY
ASSOCIATION,
19 BOYLSTON PLACE.

b 8 full green Cloth

SUMMARY

OF THE

TRANSACTIONS

OF THE

COLLEGE OF PHYSICIANS

OF

PHILADELPHIA.

VOLUME II.—NEW SERIES.

FROM MAY, 1853, TO MARCH, 1856, INCLUSIVE.

NON SIBI SED TOTI.

PHILADELPHIA:
J. B. LIPPINCOTT AND CO.
1856.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS,

OF PHILADELPHIA.

FROM MAY 4, 1853, TO JULY 5, 1853, INCLUSIVE.

Stated Meeting, May 4, 1853.

Present, seven members.

No quorum being present, the meeting adjourned.

Stated Meeting, June 1, 1853.

Dr. C. D. MEIGS, Vice-President, in the chair.

Present, twenty-eight members.

The following donations to the Library were announced:—

Flora and Fauna within Living Animals. By Joseph Leidy, M. D. From the Author.

A Synopsis or Systematic Catalogue of the Medicinal Plants of the United States. By A. Clapp, M. D. From the Author.

The Committee on Library acknowledged the receipt from the Sydenham Society, of London, of

Romberg's Treatise on the Diseases of the Nervous System.

The Treasurer presented his Annual Report, which, with the vouchers, was referred to the Censors.

The Committee of Publication reported, that since the last meeting of the College they had issued the 10th number, Vol. I. New Series, of the *Summary of Transactions.*

The Vice-President, in the absence of the President, appointed the Standing Committees, as follows:—

On Meteorology and Epidemics—Dr. W. S. W. RUSCHENBERGER.

On the Library—Drs. F. WEST, W. PEPPER, and J. J. REESE.

Dr. C. D. MEIGS read, agreeably to appointment, the following

BIOGRAPHICAL NOTICE OF DANIEL DRAKE, M. D.

IT is a custom with the College of Physicians of Philadelphia, to direct that a Memoir shall be presented here, of every departed fellow and associate. This custom holds out, to each living member of the institution, a warning and invitation to consider what manner of record shall be made in this place as to him, and to ponder upon that course of life which may best secure for him an honorable remembrance on the one hand; or, on the other, leave him to depart from your midst, conscious that he has neither contributed, nor attempted anything for the increase of the talent he had received as a sacred trust, out of that great inheritance we have, in common, derived from the whole history of our philosophy and our art. The talent that is confided to a scholar cannot be safely hid away in a napkin; and he who fails to improve upon it, shall not wholly escape condemnation.

If those who misemploy their powers and opportunities are worthy of blame, a meed of praise belongs, on the other hand, to the good and faithful scholar who has been diligent with regard to the things intrusted to him; and it is due to the interests of society, that a true record of him should be made.

The progress of society in the Arts and Letters, and the security of public morals and order, result chiefly from the influence of the scholar. It is to the scholar that we are indebted for liberation from the bonds of ignorance and superstition, and for every solid acquisition in wisdom and virtue. Without education, there is no dividing line, except a distinction of greater or less ferocity, among brutal natural men. But the instructed man is raised im-

measurably above his natural estate, taught to know his wants and rights, and those of his fellows, and discern the sources of true happiness, with the methods by which to secure it for himself and the world.

We discover that one of the principal of these means is language, the perfecting of which is pre-eminently the work of the scholar, who thus places in man's hands the most solid and permanent bases of civilization, with its attendant train of blessings—it is evident that, without language, there could be neither any History nor Chronology; and thus, men would be at a perpetual stand-still, the discoveries and inventions of one age being incommunicable to succeeding generations. Without language there could be no intelligent combination of those human powers, which, directed by a wise administration of them, enable man to raise the everlasting pyramid, project the course and level of the canal, trace out the path of the railway, direct the flash of the telegraph, drive the steamer across the trackless sea, and, in a thousand forms, provide for the consummation of those blessings that are embraced in the social compact. "Even those," says M. Bunsen, "who believe that language and religion were not human inventions, but, like Prometheus' fire, given to man from heaven, cannot but admit, without rejecting all the evidences of research, that they were not communicated in a state of completeness. The reverse is, indeed, obvious, viz.: that man has never received more than the germ, which he has been left to mould and modify according to his will and capabilities."

If these opinions of the illustrious Prussian are good and true, then it is the Scholar who has developed this germ, and imparted to his fellow man all its beneficent powers and results. To hold up for emulation the lives and actions of good and great scholars is then, a useful task; and proper, truthful memoirs serve as beacons and guides for all those who would strive to rival them in excellence and in benefactions. The hope of being remembered sustains the fainting patriot, and the patient philanthropist, whose walk is not in the broad and easy paths of the world.

Being directed by the College to present a memoir of our late associate, Dr. Drake, of Cincinnati, it has appeared to me that his signal reputation in the United States, and in many foreign countries, demands a very extended notice of his life and works, and it

is to be hoped that a complete biography of this eminent person may, by some competent hand, be hereafter prepared.

However high my own appreciation of his merits, and however desirous I might be to do full justice to his memory, it cannot be expected that I shall here give more than a sketch of his life; but as that life presents so many and such varied points of interest, and was closely connected with the progress of medicine in our native country, I now bespeak the indulgence of the College, if I should dwell longer than is usually allowed, upon memorials of a man whose name is destined to be reverently pronounced, wherever the medical biography and history of America shall hereafter become known.

Dr. Drake exhibited an illustrious example of devotion to the improvement of medicine, and the diffusion of learning in general. He was, moreover, a man of a pure life; charitable and kind; of the greatest probity; laborious in the pursuit of knowledge, and indefatigable under manifold difficulties and discouragements.

He was a man, too, of a great and merited reputation, which extends even to the outer boundaries of the Republic of Medical Letters, and as a citizen, he reflected honor on his country. The stars in that country's flag, and the stripes in her shield, are not surer emblems of her glory and power, than are the names of her eminent scholars: the flag of the Union may be changed by violence or caprice, but the names and actions of the great men of her people will endure as long as her history, which, indeed, is but the record of their lives and deeds. The life of an eminent person, then, belongs to the age and to the nation that love to boast of him as their own.

Daniel Drake, the subject of this notice, was born in Essex County, State of New Jersey, where the town of Plainfield now stands, on the 20th day of October, 1785, and died at Cincinnati, on Friday, November 5th, 1852, aged sixty-seven years and fifteen days. He was one of the sons of Isaac and Elizabeth Drake, both natives of that vicinity, which had been the seat of their family from an early period in the New Jersey settlements. They were farmers, in humble circumstances as to fortune, but respectable and exemplary by a pious life and conversation.

For the improvement of their worldly condition they joined, in 1788, the migration to the Western country, and settled in Mason

County, Kentucky, upon a tract of only thirty-eight acres of land; a circumstance which clearly shows how lowly they were as to their worldly estate; for in that early period, none but the poorer sort of people can be supposed to be restricted to such narrow possessions. We are, moreover, informed that at the time of his landing at Limestone, on the Ohio, now the town of Maysville, Mr. Drake had only one single dollar remaining in his purse, and that was the commercial equivalent of one bushel of corn.

Notwithstanding he was such a poor farmer, yet being an upright and discreet sensible man, his son, in all his subsequent career, ever deemed himself honored in a virtuous parentage, cherishing the memory of both father and mother, and extending to them, in their declining years, the strong hand of filial affection and respect; so that, under his protection, they had occasion to thank Providence for the gift of a dutiful son. The mother is spoken of as a person of superior merit.

At the time of his settlement in Mason County, Isaac Drake was too poor to be able to employ hired laborers, and even the house he erected was a small log-cabin. The virgin soil was turned by the plough held in his own hands, and it appears the corn was ground into meal for their daily bread in a hand-mill which our late colleague was taught in his youth to turn. It was only by dint of hard labor, and by rigorous economy, labors in which the youthful Daniel willingly co-operated, and economy, which he then learned to practise, that the *res angustæ domi* began to expand by degrees, and that Mr. Drake was at length enabled to add so much land as to constitute a farm of fifty acres. In this place he lived and toiled up to the year 1794; at which time, having sold his land, he made purchase of another domain of two hundred acres, which was also worked by his own hands and those of his sons.

The lad had but few books in that wild new region, and of these he has given us the names in one of his lesser papers. But these books he was early inclined to read; and he learned to read them with but little assistance, for in that remote frontier region there was small opportunity of schooling for the children of the district.

In spite of such untoward circumstances, Mr. Drake very early formed the design of devoting his boy to the medical profession,

notwithstanding the circumstances of the country and the narrowness of his resources prevented him from bestowing upon the youth such preliminary tuition as might properly fit him for the pursuits of medicine. The sum total of his school-house training did not take up more than six months, and even that was interrupted and broken by various considerable intervals. But the child had a passion for letters, and read with delight the few poor volumes that had accompanied the parental exodus from the region of Plainfield. He was filled with that "noble rage" that led him from the most inauspicious beginnings to climb the rude ascents of knowledge and virtue, and nothing could freeze the genial current of a soul filled with such holy longings.

Pending Mr. Drake's migration to the western country, he had joined company on the way, among others, with a Dr. William Goforth, who was also bending his steps towards that land of promise. It was while on the voyage down the Ohio, probably on board of some Broad-bottom, that the fellow-travellers talked of bringing up the young child, then under three years of age, as a medical pupil of the emigrant physician; and accordingly, when the youth had attained to his fifteenth year, all unfitted as he was by preliminary studies for the task, he departed from the paternal roof, and, accompanied by his father, travelled to the town of Cincinnati, which he reached on the 18th December, 1800.

They proceeded at once to the residence of Dr. Goforth, who being now established in the village, a popular physician, agreed to receive the lad into his family, and instruct and bring him up in his own art. Moreover, it was a part of the contract that Daniel should have a certain amount of schooling, in consideration of the fee or bonus to be paid for his initiation into the mysteries of physic. The agreement was for four years of tuition at Dr. Goforth's house, and the Doctor's fee was to be the sum of four hundred dollars—a considerable amount, considering the state of Isaac Drake's fortune, and the laborious nature of his agricultural operations. But this shows more conclusively his appreciation of his offspring.

Thus, our late associate landed, at the early age of fifteen years, at a small straggling village, the inhabitants of which did not number, all told, one thousand souls; for it was only on the 26th December, 1788 that * * * * "Israel Ludlow, of New Jersey, and

his associates, escaping from the floating ices of the river, reared their half-faced camps on what is now called the Quay. These were the first edifices of the future city. Setting their watchmen round, they lay down with their feet to the blazing fires, and fell asleep under the music of the north wind whistling among the frozen limbs of the great sycamores and water-maples which overhung them. The next morning they rose, and began the survey of the town, and the lines were marked by *blazes* on the trees among which they passed. I need not, however, say to you, that the commencement of the goodly city was not in the midst of a long-settled and populous country, but in the depths of an unbroken though not untrodden wilderness, for you all know that hostile tribes of Indians then wandered between the gallant young settlements of the interior of Kentucky and the distant savage shores of Lake Erie."—*Drake's Disc.* Jan. 9, 1852.

Thus, gentlemen, you have seen that it was not amid the groves of Academus or under the columns of the Poecile, that our young philosophy-aspirant imbibed the early principles of wisdom. Yet, though Cincinnati was but a straggling village of rude houses and shanties sprung up beneath the primeval shades around Fort Washington, many meritorious persons had been attracted to the spot, and among them several physicians, of whom honorable mention has been made in writings published by the worthy subject of this memoir. For attainments they appeared to have been very respectable, and though dwellers in the wilderness, careful as to manners and dress, some of them scrupulously so. Many of them had been led thither to the Indian wars under General Arthur St. Clair or General Wayne; others were lured by the prospect of gain held out in the rapid progress of the transalpine population, or loved to assist in laying the foundation of the new magnificent Empire of the West.

Dr. Drake has left us some very spirited sketches of many of these people, and seems to have been impressed with feelings of great respect for certain of them. Without any doubt, they were, as men of action, well adapted to the professional exigencies of the time and the place. The accounts we have of them show them to have been characterized by that catholic spirit of philanthropy and that truly Samaritan friendliness to the distressed that ever designates and illustrates the man, and the vocation, when the

physician is not a false traitor to his mission. This is perhaps the more a subject of surprise, if we consider the comparative low grade of educational processes here, during the Colonial period, and more particularly throughout the violent bloody struggle of the Revolution, whose long painful drama was but shortly before closed. It may well be supposed that adventitious aids to a medical education, such as hospitals, books, engravings, journals, and public lectures, and demonstrations, in reach of those sojourners in the western wilderness, must have been wanting to them, or meagre indeed. We have greater reason, therefore, to pity an aspiring youth, doomed, without preparation or training, to enter on a desultory path, and obliged to trace out its course amidst the tangled mazes of medical progress from the earliest dawn of its history. He who would truly be acquainted with the medical sciences, must know them even in their origins, and throughout the whole course of inventions and improvements in them. But what is the power that can keep down and stifle the irrepressible aspirations of genius panting to be born, and live and become glorified in knowledge; or can bar out the light of truth from a mind like his whose life we are contemplating?

The physician, Dr. Goforth, to whose tuition young Drake was now confided, was a native of New York, where he was born A. D. 1766. In his youth he had the advantage of good instruction, and acquired, at least, very good manners, and appears to have been a benevolent, earnest, and truthful man. At the age of twenty-two years he emigrated to the west in A. D. 1788, as already mentioned. After occupying several different fields of labor in the new western settlements, he at last fixed upon Cincinnati as his permanent abode, and established himself as one of the physicians of the place in the early part of A. D. 1800. By address, and by the possession of a certain share of medical skill, he soon obtained a considerable amount of business in the town. Dr. Drake thought that even had he not already acquired some repute as a clinical practitioner in the West, he would have gotten business; "for, on the whole, he had the most winning manners of any physician I ever knew, and the most of them. The painstaking and respectful courtesy with which he treated the poorest and humblest people of the village, seemed to secure their gratitude; and the more especially, as he

always dressed with precision, and never left his house in the morning until his hair was powdered by our itinerant barber, John Arthurs, and his gold-headed cane grasped in his gloved hand."—*Disc.* Jan. 9, 1852.

Dr. Drake's printed *Discourse*, a charming production, which he delivered before the Cincinnati Medical Library Association, January 9, 1852, is filled with pleasing sketches of the men and manners of that early day; and it is difficult, in looking back upon the speaking pictures he has drawn, to imagine how it happened that amidst such utter laxity of the popular opinion upon drinking, cards, and pastimes, and under such *fatneant* modes of life as characterize the frontier men of America, he could wholly escape the contagion of such baleful example and companionship.

The only association then existing at Cincinnati, for mutual improvement, was one denominated the Young Men's Debating Society. Of this association, a considerable number of the young members subsequently arose to great distinction in the United States. It is enough, among these, to name the Hon. John Maclean, now of the Supreme Bench; Gen. Joseph G. Totten, the distinguished present Chief of the corps of U. S. Engineers; the gallant Gen. Jessup of the U. S. Army, and Drake himself, whose name is, perhaps, not less illustrious as an American physician and philosopher, than theirs in the field and the forum.

In the discourse in question, Dr. Drake remarks upon the very low state of literature in the place, and the irregularities of conduct of the early inhabitants; nevertheless, he there imbibed a stronger taste for learning and habits of virtuous living.

He gives us a lively representation of the methods of exercising the medical art among them; and the mode of procuring their supplies of drugs and medicines from the then remote Atlantic cities.

He portrays the superstitions prevalent among the vulgar, and describes the narrow bridle paths along which town physicians made their visitations to the sick in distant country places, and tells us of his own student life. It was his business to *put up* and dispense from house to house, the medicines prescribed by his preceptor, Goforth, to the sick villagers. "Beginning," says he, "at Peach Grove, where the Lytle House now stands, my first assigned duties were to read Quincy's Dispensatory, and grind quick-

silver into *unguentum mercuriale*, the latter of which, from previous practice on a Kentucky hand-mill, I found much the easier of the two. But few of you," continues he, "have seen the genuine old doctor's shop of the last century, or regaled your olfactory nerves with the mingled odors, which, like incense to the god of Physic, rose from the brown paper bundles, bottles stopped with worm-eaten corks, and open jars of ointment, not a whit behind those of the apothecary in the time of Solomon. Yet such a place is very well for the medical student. However idle, he will be always absorbing a little medicine, especially if he sleep beneath the greasy counter."

"New studies, and a new studio awaited me," says Drake, "and throughout the ensuing spring and summer, the adjoining meadow, with its forest shade-trees, and the deep and dark woods of the near banks and valley of Deer Creek, acted in the manner of the wilderness on the young Indian caught and incarcerated in one of the school-houses of civilization. Underneath those shade-trees, the roots of which still throw up an occasional scion, or among the wild flowers of the wood, which exhaled incense to Flora instead of Æsculapius, it was my allotted task to commit to memory Cheselden on the Bones, and Innes on the Muscles, without specimens of the former, or plates of the latter; and afterwards to meander the current of humoral pathology of Boerhaave and Van Swieten, without having studied the chemistry of Chaptal, the physiology of Haller, or the materia medica of Cullen."

These studies appear to have been fruitful of much knowledge, notwithstanding Quintilian's opinion that study in the woods is unfavorable to progress. That author says: Non tamen protinus audiendi qui credunt aptissima in hoc nemora silvasque, quod illa coeli libertas, locorum amœnitas, sublimem animum et beatiorum spiritum parent. * * * * Quare silvarum amœnitas, et præterlabentia flumina, et inspirantes ramis arborum auræ, volucrumque cantus, et ipsa late circumspiciendi libertas ad se trahunt, et mihi remittere potius voluptas ista videatur cogitationem, quam intendere.—*Inst.* Orat. x. 3.

Such, gentlemen, was the early tuition of a poor country lad whose name, nevertheless, has since become identified with the idea of those vast and populous regions that are comprised in the interior valley of North America. Such was the imperfect

training of an eloquence which learned, afterwards, to utter some of the most beautiful language, and to use the most gorgeous rhetoric to be found anywhere in the English tongue! Such was the loose training of a fiery intelligence that went forth beyond the *flammantia mœnia mundi*, and, controlled by an active vigorous will, moved men to the performance of great and useful enterprises. He early acquired the use of language, to that degree as to make it serve as the visible lucid representative of his ideas. For, when he spoke, men understood what it was he would say to them. To misapprehend the use of language, is ever to be betrayed by it: Drake knew, and used it well.

Only ten years after his landing on the northern shore of the Ohio, he was in a condition to publish his first printed essay. This was his "Notices concerning Cincinnati," a pamphlet of sixty pages, with an Appendix. In this production there is abundant evidence to prove that he already was master of considerable power of observation, that he possessed much accurate knowledge, and was filled with the genuine love of truth in science. That essay might do credit to a writer of far superior education to his own.

It appears that his preceptor soon learned to confide in the good sense and honest intentions of his sylvan pupil; and long before the close of his studentship in the Doctor's shop, was wont even to consult with him and take his opinion on the cases which together they attended. This confidence ripened at length into a sort of copartnership in the business. As a proof of the good opinion he entertained of the young man, he gave him, in A. D. 1805, what Drake calls an "autograph diploma." This was a certificate setting forth his merits and qualifications as a student and practitioner, and signed by William Goforth, Surgeon-General, First Division, Ohio Militia.

Dr. Drake ever after cherished the remembrance of this occasion, and preserved the record as a memorial of the olden time, and still more, as "the tribute of a heart so generous as to set aside all the dictates of judgment as to the qualifications of a stripling to whom it was spontaneously given."—(*Disc.* ut ante.) Drake practised physic upon this sole authorization for the space of eleven years, when the authority was re-enacted by the venerable University of Pennsylvania, at the annual commencement in 1817.

After concluding his engagements with Goforth in 1805, Drake proceeded to Philadelphia with a view to attend the medical lectures in the University. He was very poor. His correspondence with his father shows him to have been at one time reduced to his last dollar. Let the poor student, therefore, be not wholly cast down when at the distance of a thousand miles from home, and almost without pecuniary resources, he shall perceive that our Kentucky boy strove against every obstacle; and though like himself poor, and far from friends, yet never lost hope nor faith in his future, but applied the strong resources within, and raised himself to a lofty eminence in view of all his countrymen.

He returned to the West in the spring of 1806, and settled as practising physician in Mason County, Kentucky, his early home; but, after waiting there a whole year in vain expectation of success, he proceeded once more to Cincinnati, and engaged in a new copartnership with his old friend and patron, Goforth.

Now he got business, and as fortune began to smile upon him and hold out higher prospects, his boundaries grew with his advancing knowledge—and at length arrived a period, at which a profound impression was made upon his spirit, one that seated itself in his affections and purposes, and that was never afterwards erased, but settled deeper and firmer in his very heart, and ruled it and made an abiding place for itself there. To a considerable degree it fixed and determined his after individuality, moulding his life, his thoughts, his wishes.

I allude here to the attachment he formed for Miss Harriet Sisson, a niece of Colonel Jared Mansfield, subsequently the distinguished professor of mathematics in the United States Military Academy at West Point. He was united to this lady in marriage on the 21st December, 1807. She was a person of great beauty and accomplishments, and highly attractive by her amiable manners and gentle temper, which, however, did not prevent her from possessing a very positive character for resolution and steadiness in all her purposes.

Probably a deeper, warmer, or more lasting impression of love was never made on a human heart than this, which grew with constant augmentations—until he was deprived of that great happiness by her demise, which took place on the 30th September, 1825.

During her life she contributed to his happiness, aiding him in every difficulty, sustaining him in his temptations, consoling him in his severest distresses, and cheering him in his onward career of distinction; so that she was ever a shield interposed for her husband in the warfare of life. It is not to be doubted that this was to him a bitter loss, and those who remember him may, perhaps, refer to it as the cause of that earnest contemplative expression which his countenance ever wore, and which blended itself mysteriously even with the smile that like flashes of summer lightning served to brighten the clouds that shrouded without obscuring his intellectual features.

Neither can it be doubted that he bore this loss with that stoical patience and courage that characterized the man. But her image never absented itself from him. She seemed to be always near him or above him; and always leading, always persuading him, and pointing out the paths of truth, and honor, and right, that she herself had loved. I have reason to believe that the thought of her ceased at last to be painful, and that the separation came to be rather ideal than real; for he still could ever look, when he would, upon her face and form, and he ever waited and watched with patience for the coming of the wished-for consummation of his life—that was, the being laid by the side of her mouldering remains on the banks of the Ohio, whose current was not more gentle and steady than the continued tide of his deathless affection.

Drake loved Cincinnati—he loved the West—he gloried in her progress and in her prospects. His wife lay buried there.

In these passages I am not speaking with the least insincerity, or for any purpose of rhetorical display. I deeply remember conversations with my departed friend, in which I heard him pour out these thoughts in that sweet and solemn undertone with which he was wont to converse. Nor do I consider this subject too sacred for such an occasion. I ought to speak of the man as he was, and not as he was not. This was a part of the man. Marc Anthony said, "I come to bury Cæsar, not to praise him." Shall some worldling, some vapid bargain-maker, say this was an idle dream! and that it shows Drake to be a visionary! Not so; for it is not possible that the identity of a single human intelligence is ordained to be scattered like dust particles on the wind, and

its oneness converted into nothingness again. The indestructible identity the ME, is but another expression or formula of the immortality of the soul; and though Drake did not see with mortal eyes, but only apprehended by a concentrated æsthetic force, the existence and proximity of that gentle and faithful monitor and lover who had blessed eighteen years of his life, by the sweet communion of heart with heart, yet was she there; and watching and waiting for his coming at the last declining hour of his widowed age. If it was a dream, it was also an abiding and consoling belief.

I have already made a passing allusion to Drake's first printed essay, the "Notices concerning Cincinnati," a small pamphlet that drew towards him no little public regard and consideration, which was much increased by the reissue of the *tractate*, now become a volume of two hundred and fifty pages, under the title, *A Picture of Cincinnati.*

It cannot be without a feeling of surprise, that generates a sentiment of respect for the man, that one examines this, his first public essay, and reflects at the same time, upon the slenderness of those resources out of which, at the age of twenty-five years, he thus carved out such a fortune of intellectual wealth. An untaught Kentucky boy, he had already made no inconsiderable acquisitions in the department of Natural History, both in Geology and Botany. The tract contains the fruits of his study of the climate and diseases, the geology, botany, zoology and population of that region. The *Calendarium Florœ* which he has inserted proves him to be a close observer and careful recorder, and little prone to speculations and hypothesis.

How wise he was, that he did not, like too many of us, confine himself to the dull routine of diurnal professional duties! He early bent himself to the promotion of every good work, and the edification of the general good.

In particular, he strenuously exerted himself for the establishment, at Cincinnati, of a Lancastrian School, and drew up the articles of association for it with his own hands. This good work he did in 1813, and thus has the honor to be one of the principal founders of an institution, that was subsequently expanded into the noble College of Cincinnati, which was in 1814.

About the same time, he assiduously promoted the formation of a public library for the town.

Can a man do anything better for society than promote, as far as in him lies, the diffusion of knowledge, and a love of learning among his fellow-citizens? Probably no more philanthropic act can be performed than such an one as this. Dr. Drake had felt, in his own case, how greatly knowledge conduces to virtue, which is happiness, and was, therefore, willing to extend the knowledge and means of happiness by opening up easy avenues to public instruction.

The distinguished London physician, Dr. John Forbes, uses strong language on this subject, some portions of which I shall venture now to recite. In speaking of the actual state of the laboring classes as to happiness, he says the cause of wretchedness among them is ignorance, or the general want of knowledge, and adds: "From want of knowledge, or, to express my meaning more accurately, from want of mental cultivation, the laborer is, at present, deprived of half the pleasure that should be the accompaniment of his daily labor, and of more than half the pleasure that should be his share in the hours of relaxation. It is indeed most melancholy to think that there should exist, in any civilized nation, a large proportion of the population, whose enjoyments can scarcely be said to partake of a mental character at all, or only of the lowest degree to which this epithet can apply. The subject is too painful to dwell on; but it is one, I hesitate not to say, which is a blot on the escutcheon of humanity itself, and, next to actual slavery, cries the loudest for redress. That the sole remedy to be found for such a great evil, education, should be withheld for a single day, while civilized and instructed Christian men are debating over trifles—trifles surely, when compared with the great thing at issue—is what requires to be seen and heard, to be believed."—Forbes, *Happiness in its relation to Work and Knowledge*, p. 29.

See, then, gentlemen of the College of Physicians, how long ago it was, and how early in his career, that our lamented companion entertained views like these, of one of the most distinguished of our European brethren!

There had been established what was called the School of Literature and the Arts at Cincinnati. On the 23d Nov. 1814, he

delivered, before that society, an anniversary address which was published; and in the course of the same year he read two papers on the earthquakes of 1811, and on the aurora borealis, which were printed in an appendix to the *Picture of Cincinnati*. You shall find in that anniversary address, a good deal of that sort of solid merit that may, with justice, be said to mark almost everything that he wrote. He was ever an ardent, enthusiastic man, but held those qualities in subjection to a vigorous judgment.

Hear him speak when he would move those frontier-men to seek, in the pleasures of science, the sources of great happiness.

"On this subject, gentlemen, our enthusiasm can scarcely rise to excess. We are surrounded by a boundless region, redundant in objects the most novel and inviting, where the strong may exhaust their mightiest energies, and the weak find, in the luxuriance of the harvest, a substitute for strength, where gleaning is neither necessary nor practicable, and the time elsewhere employed in the search for fruitful fields is devoted to selection in the midst of universal plenitude. But let us descend to particulars. The climate of this country exhibits many singular phenomena. To note, and compare them with those of other climates, and thereby ascertain the laws peculiar to each and common to all, are objects of great interest to the meteorologist, and remain to be attempted. To observe the symptoms peculiar to our diseases, investigate their causes, and assign their remedies; to mark the succession of epidemics, and point out the means of preventing endemics, are duties of the first consequence, which the physicians of this country have yet to perform. To analyze and compare the varieties of our soil, and assign to each its appropriate species of culture; to ascertain the extent and diversities of the great calcareous strata which support this region; classify their marine exuviæ, and investigate their marbles, their saline deposits, and their metallurgic precipitates; to explore the tracts of sandstone that are occasionally found, and bring to light their beds of coal; to survey and disintegrate our extensive alluvions, determine the process of their formation, their richness in iron ore, in copperas, alum, clays and ochres; their antiquity, and their vegetable and animal remains," &c. &c. I shall cite only half of this paragraph of suggestions, and this suffices to show the character of that mind that so strongly marked the man.

In September, 1815, he published his *Natural and Statistical View, or a Picture of Cincinnati and the Miami Country*, illustrated by maps, with an appendix containing observations on the late earthquakes, the aurora borealis, and south-west wind. The work was divided into seven chapters, treating respectively on a geographical and historical introduction to the whole; on Physical Topography, Civil Topography, Political Topography, Medical Topography, Antiquities, and, lastly, the Conclusion and Appendix. This is not a befitting place to present a review of this work, and I therefore rest with the passing observation, that it is a tract replete with useful information; and that it was, at the time of its appearance, in great request; and that it contributed essentially to spread abroad the opinion that Dr. Drake was a man of considerable attainments, and worthy of confidence as a faithful reporter of carefully observed facts.

So considerable, indeed, was the repute he had obtained in the now rapidly growing West, that a proposal was made to him to accept a professorial chair in a medical school about to be founded at the flourishing city of Lexington, Kentucky. He had as yet attended only one course of medical lectures, and that so far back as the year 1805; he therefore proceeded to Philadelphia, where, after fulfilling the obligations of a student, he was graduated Doctor of Medicine at the Commencement, which followed the close of the session of 1815–16.

In regard to this incident, I beg leave to lay before you the following letter to me from Prof. Carson, Dean of the Faculty of the University of Pennsylvania, which is interesting to all those who knew and admired our late Associate.

May 31, 1853.

DEAR SIR: As all circumstances connected with the life of the distinguished member of our profession, the late Dr. Daniel Drake, are interesting, permit me to communicate those relating to his graduation at the University of Pennsylvania in 1816. To you, as his biographer, they will be most appropriately given.

On the 11th of May, 1816, a special commencement was held for the purpose of conferring upon him the degree of Doctor of Medicine, more than a month after the regular Commencement had been held. The reasons for this are contained in the following note, which is appended to the record of the transaction:—

"The circumstances leading to this extraordinary proceeding, were as fol-

lows : 'Daniel Drake, a practitioner of medicine in Cincinnati, having complied with all the requisitions of the University, was admitted a candidate for its medical honors. He accordingly presented to the Dean of the Faculty (Dr. James) his thesis, and then left the city. An arrangement was made by the Dean to apprise him of the day of Commencement, but the letter containing the information did not reach the candidate, and he arrived in Philadelphia the day after the Commencement. In this dilemma he stated his anxiety to graduate in this school in preference to others, in which he was led to believe no difficulties would be opposed to his application. Under these circumstances the Professors, considering the high literary accomplishments of Mr. Drake, the value of his late publication, his present eminence and his future promise, preferred the present plan to the conferring of an honorary degree, which they have always been desirous of avoiding.' Accordingly, on April 30th, Dr. Drake was examined and recommended to the Board of Trustees for the special mandamus, which was granted at the Commencement held as has been stated."

Very truly your friend, J. CARSON.

The autumn of the next year, 1817, found him occupying the chair of Materia Medica in Transylvania University, which he resigned early in the spring of 1818, and returned to Cincinnati. In May, 1818, he gave a course of lectures there on Botany, the introductory discourse of which was published in one of the city newspapers. In conjunction with the Rev. Elijah Slack he engaged in a course of medical instructions, in which that gentleman took charge of the department of Chemistry, while the Materia Medica and the Practice of Physic was confided to Dr. Drake. Their class consisted of twelve persons.

Dr. Drake was a man intensely progressive, and ever on the watch for occasions to do some good; and now he began to perceive that the great West should stand in need of some domestic institutions for the propagation of medical knowledge, and supposed that his beloved Cincinnati offered great advantages for the establishment and conduct of a good school of medicine—since her early strides clearly pointed out the future greatness and progress of the gigantic West. In common with many western physicians he imagined that the climate and soil, manners and customs of the West, and some shades of peculiarity in the diseases prevalent there, rendered it desirable that the physicians of the country should be educated by physicians of the country. Whether these views be well founded or not, I take pleasure in bringing forward, in this place, his matured notions upon the subject,

one which has excited no little discussion of late years; not only to show how he reasoned upon that question, but because it is, probably, as plain a declaration of western argumentation of the subject as need be desired. "That many physicians overrate the degree of variation from a common standard which the diseases of different countries present, I am quite convinced; but feel equally assured that if the maladies of each country were studied and described without reference to those of any other, it would be found, if the state of medical science were equal in them, that the works thus produced would not be commutable, but that each would be better adapted, as a book of etiology, diagnosis, and practice, to the profession and people among which it was written, than to any other. How much better, would depend on the various identities and discrepancies which might exist between the countries thus compared. If their geological, hydrographical, topographical, climatic, social, and physiological conditions were nearly the same, of course their medical histories would be much alike; but if they differed widely in one or several of these conditions, a corresponding diversity would appear in the respective histories of all the diseases which admit of modification from causes referable to those heads." (*Introd. Inter. Valley.*)

The foregoing is a very candid exhibition of the argument, of the force of which or its applicability to divers positions within the boundaries of the American Union, the reader is the proper judge. He deemed them, with other motives, sufficient to warrant the commencement of an institution on the banks of the Ohio, and he labored with the greatest zeal and painstaking to carry into effect those views. He succeeded, at the seat of government of Ohio, in procuring the passage of a law on the 19th of January, 1819, chartering the Medical College of Ohio. Drake was the real founder of that college, and he ever afterwards entertained a strong feeling of personal attachment towards it, with warm desire for its usefulness and greatness, although circumstances separated him for many years from it. The Medical College was opened November 11, 1820, on which occasion he pronounced an inaugural discourse on Medical Education, afterwards published in pamphlet form. In the winter curriculum of lectures he held there the chairs of Institutes and Practice, and Obstetrics.

Upon the establishment of the Medical College of Ohio, he soon

extended his views for the public welfare, and began to labor with a purpose of having added to the institution, a great Public Hospital, a difficult task at that period. Yet, by unremitting exertions of his own, and aided by leading men, whose minds were on this topic inflamed and enlightened by his own zeal and intelligence, he compassed the enactment of a charter for the Hospital, accompanied by a grant from the State treasury of ten thousand dollars, to defray the expense of erecting the edifice. This hospital, which is still in the constant exercise of its beneficent purpose, is one of the most considerable in the West, and as it is connected with the Medical College, lends the most important aid in the business of clinical medicine and surgery as taught in that school. Cincinnati is indebted mainly to Dr. Drake for this good work.

One might well suppose that here he would have found a permanent resting-place, and a fair field for the display and exercise of the great abilities with which he was richly endowed. But new countries are, above all things, characterized by changeableness. In fact, the population of such regions is unstable as the waves of the sea; and in such a society wave succeeds wave, the last influx of population removing and confounding the antecedents. Men rather may be said to bivouac than to settle in new countries of the American States; nor is it surprising that this should be the case in a nation which, but two centuries since, having landed, a small but intrepid band of pilgrims on Plymouth Rock, on the coast of New England, already occupies the vast expanse of its territory, even to the shores of the Pacific Ocean. It was with Drake as with every other item of living beings out there.

The college faculty, originally constituted of five professors, was, in the spring of 1822, reduced to only three—Dr. Slack, Dr. Smith, and the subject of this notice. The two former had become inimical to our Professor, and as the power of removal was vested in their board, it was moved and seconded that Dr. Drake be expelled from his professorship. Drake was President of the Faculty. "Is the motion seconded?" said he. "Aye!" "It is moved and seconded that Dr. Drake be expelled from his professorship. Are you ready for the question? All those who are in favor of the motion will say Aye." There were two affirmative voices. "The ayes have it—Dr. Drake is expelled," said the imperturbable; and, putting on his hat, he vacated the

chair, leaving the two voters in possession of the power over an institution he had founded, and which he fondly and always hoped to see honored and useful. It would be curious to have a daguerre of the physiognomies of the remaining members after the departure of Dr. Drake. He soon afterwards published a narrative of the rise and fall of the Medical College of Ohio, which I am unable to procure.

Assuredly no charge of fickleness of purpose can rest upon him as to this change. Yet doubtless it has, in some degree, contributed to spread abroad a notion that he was a man unsteady of purpose.

I believe it was about this time that a great thought brooded in his mind, which, gradually developing the primary germ, took the form of that important work, to which with intrepid courage and unflagging industry he devoted a major part of his remaining years. It employed him from 1823 until the period of his death—near thirty years. In 1823 he issued a printed circular to the physicians of the West, announcing his purpose to construct, upon the diseases of that region, a work, for the materials of which he solicited their contribution of results obtained by experience and observation throughout that vast area. As his attention became more and more riveted upon that scheme, its importance expanded under his view of its novelty and grandeur, and he felt a warm desire to execute a monument worthy of the country, of the profession he loved, and of his own fame. To write upon the diseases of the West, as he proposed the plan, it were not enough to treat of agues, of congestive fevers, or milk sickness, or yellow fever. It became necessary to show what is the *West;* and hence there grew up before him the ideal of an extended reconnoissance of the great West, whose geography and topography; whose geological, ethnological, and sanitary characteristics, would require years of toil and a conscientious adherence to the visible and palpable truths of the subjects.

He informs us, in his Preface, that the germ of this work was a pamphlet, already mentioned, entitled "*Notices concerning Cincinnati*, printed for distribution forty years ago."

In order to show you the vastness of the field in which our deceased Fellow toiled so faithfully, I beg permission to quote here, from Part I. Chapter I. Sec. I., the following words:—

"I. The interior valley of North America begins within the tropics, and terminates within the polar circle; traversing the continent from south to north, and passing through the entire northern temperate zone. In the south it rests upon and is deeply indented by, the Gulf of Mexico; in the north it bears a similar relation to the Polar Sea and Hudson Bay; the latter penetrating it so deeply, as to come within twenty-two degrees of latitude of the Gulf of Mexico. On the east its limits are the Appalachian Mountains, which extend from the thirty-third to the fifty-third degree of latitude, each end terminating in a low water-shed. On the west, the immense chains of Rocky and sea-side mountains, beginning within the torrid zone and ending within the polar circle, divide it from the Pacific Ocean. These mountain borders, as may be seen on the map (Pl. I.), diverge from each other as they cross the continent, and thus the valley regularly widens as it passes from south to north."

"II. Area. Of the area of this great intermontane region it is not easy to speak with much precision. To the south, its latitudes vary from the eighteenth to the thirtieth parallels; in the north, from the fiftieth to the seventieth. In the south, its eastern margin is found near the eighty-first meridian; its western in the one hundred and fifth; but in the fifty-third degree of latitude, it advances east to the fifty-sixth meridian, and west to the one hundred and sixteenth; finally, in the sixty-eighth parallel, its western margin is found in the one hundred and thirty-sixth degree of longitude."

"If we assume eight millions of square miles as the area of North America, the valley cannot be estimated at less than six millions, or three-fourths of the whole continental surface. Its northern half is, however, rendered nearly uninhabitable by the state of its surface and its climate; and, therefore, the portion which presents objects of immediate interest to the medical etiologist does not exceed three millions of square miles, of which, as yet, not more than one-third has acquired even a sparse civilized population."

I have brought forward the foregoing extract from his work with a view merely to open up a general conspectus of the field in which he designed to labor, and point out more clearly the intellectual directions and aspirations of the man; and it appears to me that, considering all the phases of life presented in the preceding sketch of

his career, it cannot but be conceded he was a man moved by great and bold designs and aspirations as a scholar, as well as a person of indomitable energy in the attempt to elevate himself from the lowest beginnings in the scholar-class, to a position in its highest rank. I hope to show, in the course of this notice of him, what he really did effect of this design of his. For the present I make the remark that he was a man in the highest degree unselfish. He lived and died without making haste to be rich. Situated at the radiating point of a growing tide of civilization and progress, and entertaining the most glowing anticipations of the progress of population and means of happiness, amidst those loved scenes wherein he had passed his youth, and well aware of the certain and rapid appreciation of values all around him, he never became a speculator in real estate, else it would have been an easy thing for him to become a *millionaire*. He preferred the sweet pleasures of that "Divine Philosophy," which to his apprehension furnished a "perpetual feast of nectar'd sweets, where no crude surfeit reigns," and so followed the footsteps of that fair science who led him "far as the solar walk or milky way," and onwards until his comprehending spirit came at length to grasp the whole ideal of a Cosmos—he, the rude unlettered farmer boy of Mason County, taught beneath overarching forests on the wild banks of the Ohio! Is it a question whether he were a wiser and happier man if he had, instead, addressed himself to the worship of the Mammon of Riches? Dr. Drake was a man always beckoned forwards, and drawn towards an ideal that he had erected. This was not the Demon of Socrates, nor would he sacrifice a cock to Æsculapius, like the great and wise Athenian, but he devoted himself. I leave this honored audience to decide whether this is wisdom or not; and whether we, who are left behind in the world, and in the desire of fame, are more benefited by his example than we should be, had he lived and died merely a wealthy American!

He always labored for his own support, emulating in that respect the example of holy St. Paul, who says: "Neither did we eat any man's bread for naught; but wrought, with labor and travail night and day, that we might not be chargeable to any of you."—*Thess.* ii. 3. A portion of his time was employed in practice, but a much larger share was devoted to public instruction in the profes-

sorships which he at various times held; the avails of which sufficed for his sustenance and respectability.

There were three guiding thoughts for Dr. Drake. One was that he might be able worthily to execute his great task as to the diseases of the West; one that the Medical College of Ohio, which owed its origin to him, might be greatly useful and honored, and also he earnestly desired that the institution should, at some future day, recall and reinstall him as one of its professors; and, lastly, that, dying at home, he might, followed to the grave by a train of professors and pupils, be borne to rest near by the remains of her whose ideal, as I have said, was never absent from him.

Nor did these images, which preoccupied, render him morose; on the contrary, he was cheerful, contented; wanting but little; indifferent to sensual indulgences and gratifications; abhorring all intemperance; a hater of untruthfulness and all false pretence; highly assiduous in the discharge of his daily duties, and ever ready to promote and uphold any good word or work. Thus, he brought forward the project of a railway between Cincinnati and the city of Charleston, South Carolina, submitted the report of a committee on the subject, which he had himself prepared, and was doubtless one of the chief movers in that great and laudable enterprise which entitles him to the praise and gratitude of our nation. This was in the year 1835, and in the summer of 1836, he attended a convention held in Knoxville, Tenn., to promote the same object.

In the general prevalence of habits of intoxication, and the use of intoxicating drinks, he saw the fruitful source of unnumbered ills both public and private, and he abhorred intemperance as an opprobrium of the land. His own practice in this matter was sufficient warrant for him to lift up his warning voice, since in all his career, he had set his face strongly against the pernicious practices of society in this behalf. Many eloquent, warm-hearted addresses were made in public by him, both on the east and the west side of the mountains. In these performances he was singularly felicitous, not more by the unerring truth of his words than by the visible conviction and sincerity that prompted him to speak. Even the medical classes that listened to his lectures, were brought under the influence of this spirit, and by the associations he formed among them, he rendered good service, not only by wooing them

away from the dangerous habitudes of the times, but by thus enabling him the more effectually to pour into their intelligence the rich stores of his own medical philosophy and art.

This College are well acquainted with the wide spread of professional opinion in this country, in regard to our processes of medical education, and with the prevalent wish that some changes should be made in relation to the length of the courses of lectures. Dr. Drake held the same opinions long before the institution of the American Medical Association. In an inaugural discourse pronounced by him at the opening of the Medical College of Ohio Nov. 11, 1820, thirty-three years ago, he held this language:—

"It cannot be supposed that the Legislature of Ohio will long suffer an institution so beneficial to the people in the State, to struggle, unsupported, with the difficulties that must beset its infancy. But, should a different policy prevail, it will not, therefore, be abandoned. Its growth may be retarded, but, like the pine on the stormy and barren summits of the Alleghany, what it loses in luxuriance it will gain in vigor and hardiness. Its professors are determined on success, and hope to deserve it. To show more fully on what their expectations rest, will occupy us but a few moments. The college to which they belong offers one advantage over all that have been hitherto established in the United States. Not one has a session exceeding four months—a period confessedly too short for the course of instruction they are designed to impart. The lectures in this institution will continue five months, and there will be fewer of them daily. Thus, the pupils will not be perplexed and oppressed by exuberance, nor hurried so rapidly on as to be precluded from the necessary reading and reflection," &c. &c.

The idea, then, of lengthening the courses of public lectures, in the American Schools, is not so novel as has by some been supposed; and though it is, perhaps, to the direct influence of the public opinion of the profession, rendered powerful by the American Medical Association, that we owe the positive increase of length of the courses, let us at least do Dr. Drake the justice to admit him as one of the earliest advocates of that reform. No member of the American medical profession received, with greater joy than he, the early impressions of hope for some improvement from the constitution of the great society than he did. He attended, and

took an active and self-denying part in the session of that body held at Cincinnati, where, I may casually remark, he was not honored with the presidency. He journeyed also to Charleston, S. C., where his eloquent appeals were heard in vain on the questions of certain ameliorations he was most desirous to see adopted. He made another long journey, that he might take his place at Richmond, in Virginia, whence he proceeded to the mountains, in order to conclude some topographical investigations for his work, and thence reached his home in Cincinnati. It cannot be said that he exerted any positive influence upon the deliberations of either of the above named conventions; and, doubtless, he suffered no little disappointment at the failure of plans which he deemed likely to redound to the advantage of Medicine. In all these things he sought only to elevate it; and, in his view, Medicine is elevated only when it grows in usefulness to the people. He was a man who never looked upon Medicine as a refuge for the doctors, but rather as only an asylum for the suffering portion of the population.

Let me now show, not only his feelings on the subject of the physician's mission, but also exhibit some evidence of what progress in scholarship had been made by the uneducated, unaided Kentucky lad of the year 1800. And in order to that end I shall read the following passages from the same inaugural, teeming with noble sentiments clothed in the richest forms of expression.

"The powers of the healing art, in shortening the stages of a disease, are equally obvious; and next to the mitigation of pain nothing is more grateful to an invalid than his early release from the chamber of sickness. Every convalescent has an exquisite relish for the objects and aspects of nature; and even in their coarsest and simplest dress, they never fail to delight him. But there are moments in which the great artist arrays her in charms uncommonly fascinating. In every country the elements of this enchantment are in some degree peculiar. In this, we are presented with the most striking exhibitions of beauty and grandeur in an April morning, when the heavens have distilled their fresh and purest dews upon the tenderest flowers of the year; when the buds of our forest expand to the enlivening influence of a vernal sun, while the same influence has restored our migratory birds, and 'made vocal every tree,' with their songs of love; when the

Ohio, swollen by the last snows of its parent mountains, wheels rapidly along its weight of waters, and reflects the brightened disk of that luminary, whose return has dissolved the spells of winter, and diffused new energy and action through every animate and inanimate form; or, on an evening of August, after the oppressive heats of the great fountain of light and life have been tempered by a thunder-gust, and the freshened atmosphere wafts the sweet exhalations of our blossomed corn-fields; when the green mantle of our hills assumes a livelier hue, and the rays of the setting sun illumine the departing clouds with the softest tints of red and yellow light. To languish in captivity till these evanescent glories have passed away, is the agony of privation. To be emancipated by medical skill, and set at large with renewed capacities for enjoyment, infuses gladness of heart, and inspires gratitude to the Great Physician above, as well as to the humble instrument by which his beneficence is administered." (*Inaug. Disc.* 27.)

As I am willing to exhibit specimens of his descriptive power which I regard as highly expressive, not only of the nature of his sentiments, but also of his attainments as a belleslettres scholar, I shall venture in this place to read for you an extract from his great work, which may challenge a comparison with any, the most graceful forms of language in our English literature.

Dr. Drake, in one of his many excursions in search of materials for his History of Medical Topography and Diseases, extended his voyage, in 1842, to the Sault de St. Marie and Lake Superior. His examination of the climate, and other circumstances of that interesting region, induced him, upon his return, to throw together his thoughts in the form of a pamphlet, published under the title of *The Northern Lakes, a Summer Residence for Invalids of the South.* This essay, which merits a reprint and general diffusion, seems to have been the foundation of his remarks at p. 348 of his work. After descanting upon the delicious atmosphere and other hygienic advantages of the Island of Mackinac, which is situated in the beautiful Straits of Michilimackinac, he proceeds to say, looking from the elevated summit of the ruins of Fort Holmes:—

"When the observer directs his eye upon the water more than the land, and the day is fair, with moderate wind, he finds the surface as variable in its tints as if clothed in a robe of changeable silk. Green and blue are the governing hues, but they flow into

each other with such facility and frequency, that while still contemplating a particular spot, it seems, as if by magic, transformed into another; but these midday beauties vanish before those of the setting sun, when the boundless horizon of lake and land seems girt round with a fiery zone of clouds, and the brilliant drapery of the skies paints itself upon the surface of the waters. Brief as they are beautiful, these evening glories, like spirits of the air, quickly pass away; and the gray mantle of night warns the beholder to depart for the village, while he may yet make his way along a narrow and rocky path, beset with tufts of prickly juniper. Having refreshed himself for an hour, he may stroll out upon the beach to listen to the serenade of the waters. Wave after wave will break at his feet, over the white pebbles, and return as limpid as it came. Up the straits he will see the evening star dancing on the ruffled surface, and the loose sails of the lagging schooner flapping in the fitful land breeze; while the milky-way, Death's Path of the red man, will dimly appear on the waters before him. Behind, in the street, a lively group of Canadian French of every shade of color between white and red, will gossip and shrug their shoulders; on one side, should the Indians, who still inhabit the shores of Lake Michigan, be on a visit to the island, he will hear the uproar of a lodge of drunken Chippeways, with the screams of women and children, and the cackling of frightened hens; on the other, will see the sober and listless Ottawa, sitting in silent vacancy of thought, on his upturned birch canoe; his wife within the tent, spreading cypress bark and flag mats upon the gravel, as lodgings for the night; while half a dozen children loll or play about the door, and as many half-starved dogs curl up among them. Surrounded by such scenes, the traveller begins to realize that he is a stranger; when suddenly, a new phenomenon appears and fixes the conviction. Every object becomes more visible; and, raising his eyes, he beholds the heavens illuminated with an aurora borealis, where he reads, in fantastic characters of strange and eccentric light, that he is, indeed, a sojourner in a strange land, and has wandered far from home and his friends in the sunny regions of the South."

Let us compare the foregoing charming pictograph, if I might venture to say so, with the gawky Kentucky boy who, in 1800, proceeded to the house of Dr. Goforth, to commence, at the age of

15, an almost unassisted course of mental development; and let those physicians take shame to themselves, who, with the abundant means of education scattered with lavish profusion all over the land this day, exhibit in their correspondence and published tracts, the indubitable proofs of their indifference to the claims of our scholarship. It is to me difficult, nay it is impossible to scan these passages, and many others equally pleasing—I cannot follow in the high æsthetic tract over which he would lead, without feeling ready to offer homage to that intelligence which made him one of America's most gifted sons. May it not be that the men of Cincinnati, that now Queen City, whose birth and infancy he observed and nurtured, shall, in some future day, honor themselves and their municipality by inaugurating a deathless statue of the eminent citizen whose name is indissolubly connected with her origins!

Inasmuch as a considerable part of Dr. Drake's life was passed in the station of a public teacher of medicine, it behooves me now to give some account of his transactions in that relation.

I have already stated that, previously to his departure for Philadelphia, in the autumn of 1816, there was offered to him a professorship to be established at Lexington, and that, in the winter of 1817, he did occupy the chair of Materia Medica in that school, but resigned it in 1818.

In May, 1818, he delivered, at Cincinnati, a popular course of lectures on Botany, and in the following fall, was connected with Dr. Slack in a course of private lectures; his department being the Practice of Medicine and the Materia Medica. The class consisted of twelve students.

You are aware that he was Professor of the Institutes and Practice of Medicine and Obstetrics in the Medical College of Ohio in 1820, and of his summary ejection therefrom, by the votes of his two colleagues in the spring of 1821.

Dr. Drake was recalled to the Transylvania School in 1823, and held there the professorship of Materia Medica during the session of 1823–4, at the close of which he was transferred to the chair of Therapeutics and Practice, which he filled until he resigned it in 1827.

He was elected to the professorship of the Institutes and Practice in Jefferson Medical College at Philadelphia, in the year 1830, and accepted it with the express understanding that he would hold it

for only one season, when his interests would draw him to the West again.

Before his departure hence, he had engaged several gentlemen, in whom he placed confidence, to proceed to Cincinnati for the purpose of establishing a medical school of the Miami University. But that plan failing to go into operation, and the Faculty of the Medical College of Ohio being reorganized, most of those gentlemen received appointments in it; and in that catholic spirit which distinguished him, he accepted the minor office or professorship of Clinical Medicine; but resigned it in the early part of 1832.

In 1833, he declined a professorship in the University of Virginia which was tendered to him.

In 1835, he obtained the organization of the Medical Department of Cincinnati College, and held in it, a professorship of Theory and Practice during the four following years, when the institution was discontinued. This happened in 1839.

In 1839, he was elected to a professorship of Pathological Anatomy and Clinical Medicine in the Medical Institute of Louisville, Kentucky, and labored there assiduously during ten years, pending the first six of which he lectured on the topics above named, but for the last four years upon Pathology and Practical Medicine.

But it was ever Cincinnati that he loved—that was his home, and there he wished to die, and there be buried. A ceaseless attraction drew him near the spot where rested the remains of her whose image was always present in his heart. Let no one, then, be surprised that he should resign at Louisville to accept at Cincinnati the chair of Special Pathology, Practice, and Clinical Medicine in the Medical College of Ohio, founded by him in 1819.

I have never learned his motives for soon abandoning this post, which he gave up in 1850, and then rejoined his former associates at Louisville, where he was fully reinstated.

In May, 1852, he attended the Richmond meeting of the American Medical Association, and upon his return to the West, again laid down his appointment in the Louisville school to accept, and for the last time, a professorship at home—his beloved home. He was elected Professor of Theory and Practice in the Medical College of Ohio. He was surrounded by a band of capable men, in whose ability and purposes he could confide, and here

one might hope to see him firmly fixed at last in the place which he preferred to all others. He addressed himself with the greatest earnestness and zeal to his task. The business of the session began with good promises of success, but Drake's hour was at hand, and the fatal malady which deprived us of him, struck him down, that he ceased to live, on the 5th November, 1852, dying at an age a little beyond sixty-seven years.

It is thus seen that Dr. Drake, in his whole career, had held nine different professorships in medicine from 1817 to 1852. In only one of these did he continue for a long time to pour forth those sound and useful doctrines which he was able to impress upon the youthful student. It was at Louisville that he was reinforced by those zealous and faithful, as well as able colleagues, whose respect and affection he bore with him to the grave. I have reason to know that these many changes, which exposed him to the charge of want of steadiness of purpose, filled him with regret, lamenting that he had not been able, like some of his contemporaries, to maintain one station from beginning to ending of his career.

I conceive, however, that the charge of want of steadiness is unwarranted upon these grounds alone, and not so upon any others whatever for those who will review his whole history, exhibiting a life of incessant activity and unshaken purpose to do what he deemed his call and mission, I mean, to deal justly as to all men, and construct his work on the Disorders of the West. With him this last was a ruling idea: he was never weary of this labor, nor tired of its observations, researches, and records. He never flinched at its expense, nor pined after the riches from the possession of which it debarred him. He was *steady*. This was his work, and he was true to it and, s t e a d y, he labored upon it till he died. Is it proper to disparage such a man with the supposition that he is unreliable—capricious—unstable of purpose!!

It is not possible, in this notice of our countryman, to present an elaborate account of this work, upon which, I believe, his claims to high consideration as an American writer must chiefly rest. It is entitled *A Systematic Treatise, Historical, Etiological, and Practical, on the Principal Diseases of the Interior Valley of North America, as they appear in the Caucasian, African, Indian, and*

Esquimaux Varieties of its Population. Cincinnati, 1850, 8vo. pp. 878.

The work is divided into two Books. The first book treats of General Etiology, and contains three parts, of which the first discusses questions of the Topographical and Hydrographical Etiology of those extensive regions. This first part has sixteen chapters, which comprise his results, as 1st. A General Analysis of the boundaries and aspects; hydrographical system, altitudes and configuration; geological outline, and hydrographic basins. 2d. The Southern Hydrographic basin or Gulf of Mexico, which is continued in the third chapter, in which he describes the medical topography of the principal places on the Gulf. In chapter fourth, he reviews the delta of the Mississippi. Chapter fifth relates to localities in and around the delta. The sixth chapter details his information relative to the bottoms and bluffs of the river above its delta. In the seventh chapter he gives an account of the region west of the Gulf and the Mississippi River. The Medical Topography of the regions east of the great river, and south of the Ohio basin, is exposed in chapter eighth; and the ninth chapter is devoted to the history of the Ohio basin, principally the tributaries to the great Ohio from the southern side. The hydrography of the same basin, as coming into its trough from the northward, is comprised in chapter tenth.

In chapter eleventh he goes yet farther to the north, exploring the basins of the Kaskaskia, the Illinois, and Rock Rivers.

The great hydrological system of the St. Lawrence, with the magnificent series of the great American Lakes, is treated of in chapters twelfth, thirteenth, fourteenth, and fifteenth.

The Hudson Bay and Arctic Hydrographical basin take up the last chapter of Part I., which is chapter sixteenth.

The second Part of Book I. treats of Climatic Etiology, in five chapters, of which chapter first treats of the nature, dynamics, and elements of climate. Then comes, temperature of the Interior valley, atmospheric pressure of the Interior valley, winds, aqueous meteors, and, lastly, electric phenomena, and distribution of plants and animals. Part III. contains the author's views on Physiological and Social Etiology, in four chapters, as population, modes of living, clothing, lodging, bathing, habitations, and shade trees, and occupations; pursuits, exercise, and recreations.

Book the second has one Part only, as far as published. It treats, in eleven chapters, on, 1. The nomenclature, varieties, and geographical limits of autumnal fever, together with the topographical and climatic conditions under which it prevails. 2. Speculations on the efficient cause of autumnal fever. 3. Mode of action and first effects of the remote cause; and 4. The varieties and development of autumnal fever.

Chapter five considers of intermittent fever, simple and inflammatory. Chapter six, malignant intermittents; seven, remittent autumnal fever, simple and inflammatory; eight, malignant remittents; nine, protracted, relapsing, and vernal intermittents.

The tenth chapter contains the fruit of his researches upon the pathological anatomy and consequences of autumnal fever; which is continued in the last, or eleventh, chapter, which closes the volume.

This sketch of the volume may serve at least to point out the vastness of the enterprise which our late associate undertook to carry on—but it by no means presents any exhibit of the extent and variety or precision of the special researches on the etiology of diseases in the West, nor the philosophical and dispassionate history of the signs and treatment of them. In regard to this great undertaking, it appears to me that but one thing is to be regretted—and that is, the premature termination of the author's existence—premature chiefly in this, that it was not vouchsafed for him to superintend the completion of a task so long the object of his assiduous and most conscientious devotion.

He had made arrangements while in Philadelphia, in the month of April, 1852, to put the second volume to the press in this city, and it only required for its completion that he should apply the finishing hand to the abundant materials he had, to a certain extent, not only provided but arranged. Nevertheless, let us hope, that while it has pleased the Disposer of events to remove him suddenly from the world, the hands to which this honorable task of completing a national work is now confided, may prove worthy of that high confidence, and fully come up to the expectations and demands of the profession in relation to it.

It has by some been considered unfortunate that Dr. Drake did not so arrange his work as to give to the world his information on special diseases of the West, and leave the task of recording the

immense mass of its medical topography and general etiology for an independent volume. But, I think, it requires only a moment's consideration to discern that in doing so he would abandon the cherished and wisely-concerted designs that occupied so large a share of his life. Drake, perhaps, foresaw some objections of this kind, and one might almost imagine he was ready to answer before they were stated, when he made use, in his *Discourse*, January 10, 1852, of the following words: "The *enlightened* aspirant for medical distinction is but little taken with the applause of the present moment, unless he perceives that after it has passed away there will remain some enduring element of fame—some solid and undecaying trunk, with fruit-bearing branches, which might have been overspread and hidden by a gorgeous drapery of leaves and flowers that enraptured the gazing populace for a day, but had no charms for him. When we feel in our hearts this indifference to the fleeting, and this warm regard for the permanent, let us believe that God has implanted the instinct for a wise and good purpose; and then follow it as a heavenly guide."

Again, in speaking of medical works that serve to *show the age and body of the time, its form and pressure*, he says: "The true and healthful bibliothecal element of the mind consists of monographs, reports of original observations, and the systematic works which, in different ages, have presented the existing principles and facts of the profession, as they appeared to men of genius and experience. Such works have been at all times appearing and disappearing. They are not, like ordinary compilations, superseded by others of a later imprint, but a new generation overlooks them. They are like great men who have retired from the public gaze. They lie embalmed in the truths with which they are penetrated, and cannot decay; but, like the bodies of kings and philosophers, steeped in spices and deposited in the catacombs, they are found only in unfrequented closets and alcoves." It is refreshing to hear such scholarly views, and delightful to find them set forth in such clear and masterly exposition—who that has traced out the path of our western philosopher, *e sylvis nuncius*, can doubt that he did indeed achieve the fame for which he toiled so long, and that his labors will be embalmed amidst the most precious exemplifications of the Medical Literature of America in the nineteenth century?

Dr. Drake was indisposed during the greater part of the month of October, 1852, but did not consider his malady anything more than an ordinary catarrh, though about the 15th of the month, the sorethroat and hoarseness were so considerable as to prevent him from lecturing.

On the 20th of October, he travelled to Louisville, Kentucky, being invited to attend a meeting of the Medical Society of that State. He returned on Saturday night, 22d, with some increase of the indisposition, but attended Divine service both morning and evening of the morrow.

Monday, 24th, and Tuesday, 25th, he prescribed at the Hospital, and wrote and lectured as usual. On the Tuesday evening he attended a meeting of citizens, convened in consequence of the death of Mr. Webster, where he made a short address. The evening being wet and cold, he had, after retiring to rest, a severe and protracted chill, which did not deter him from fulfilling his duties at the lecture-room and at the Hospital on the following day, Wednesday, 26th. Another chill, experienced on Wednesday night, was followed by fever, considerable cough, and intense headache; the pain being felt immediately above the eyes. Thursday, 27th, he was too ill to leave the house, and grew worse throughout the day, but rested upon a sofa near the parlor fire. The night was bad, and rendered sleepless by the pain and by ocular spectra. Friday, 28th, he was dressed and down stairs on the sofa, where he passed the day, conversing with many friends who called to see him, and with his colleagues, upon the affairs of the Medical College. Throughout this period he suffered intensely.

Another miserable night being past, he was too ill on the Saturday (29th) to descend into the parlor. He this day admitted no persons, save the members of his family, and his physicians, Drs. Rives and Richards. The action of the heart was now become very irregular, and the cough and pain in the head continually augmented in violence. In the course of the Saturday night, he arose and bled himself, sitting erect in bed. The venesection gave rise to a faintness, upon recovering from which he felt greatly relieved.

Although the prostration that followed the bleeding was very considerable, the physicians, having discovered some symptoms

of congestion of the left lung, he, on Sunday afternoon, had cups applied upon the left thorax, which took away about eight ounces of blood. Subsequently to this he took medicine, and was somewhat relieved as to the headache, and quite free from pain in the lung—yet exceedingly reduced as to his nervous system.

Monday, 31st, found him still more reduced, speaking with difficulty, and only in broken sentences.

Tuesday, September 1. The nervous exhaustion was so great that he requested his friends to pray only for his release, saying, that he had no longer a hope, nor even wish for his recovery; and that he no longer desired to live, even to finish his great work, for God had taught him the vanity of all earthly plans and hopes, and now he only desired to depart and be at rest.

Wednesday, 2d. The symptoms continued unchanged, except that they increased in severity, and his strength failed more and more. During this period, his conversation with his own family and the Rev. Dr. Reid, showed how firm was his faith in the religion he had publicly professed, which now afforded to him its safe and sure consolations.

Thursday evening (3d). He sank into a comparatively calm or lethargic condition. At a later hour he pressed the hand of a dear relative, and said faintly—"Temporary relief," "temporary relief." These were his last words. After an anodyne medicine he fell into a tranquil and deep sleep, which, for a short time, cheered the distressed friends near him with fallacious hopes of amendment—but before midnight he was insensible and nearly pulseless. Throughout Friday (4th) he opened his eyes, when loudly called by a familiar voice. It was with difficulty that he swallowed the fluids presented to him; the respiration became more and more embarrassed. In this state he continued until near six o'clock, his breathing becoming gentler and less deep, until at last, by the most imperceptible degrees, it seemed to cease. At that moment, when all around were gazing upon the face of the departing physician, he closed his lips gently, drew up his right arm and placed it on his breast, though for hours before, it had lain motionless by his side; the eyes, which now opened, seemed to beam with unearthly radiance, as if he were at the moment drinking in and reflecting the glories of the unseen world.

It was in this manner that died the most eminent member of the medical profession in the West.

He *was* recalled to a professorship in the Medical College of Ohio, which was mainly founded by him. He *was* followed to the grave by the professors and students of that institution, and the funeral train was also composed of an immense concourse of his fellow-citizens, an unprecedented number of whom came out to show their respect and veneration for their illustrious townsman. He *was* deposited in the grave where mouldered the remains of her whose image he so fondly cherished. But he did not live to complete the task over which he had impended more or less assiduously during about forty years.

I have drawn these memorials from documents furnished to me by his family, from his printed works, and from my own recollections and convictions, as to his character and conduct. Dr. Drake's name is that of a celebrated American. Let every member of this College, remember his virtues and services in the cause of medical science, and be thankful to Providence who has permitted an illustrious name to be added to the Medical Scholarship in America.

Stated Meeting, July 5, 1853.

Dr. C. D. MEIGS, Vice-President, in the chair.

Present, thirty-five members.

Agreeably to the provisions of the Charter, a ballot was gone into for officers of the College, which resulted in the election of

Dr. GEORGE B. WOOD, *President.*

Dr. CHARLES D. MEIGS, *Vice-President.*

Drs. HENRY BOND, J. WILSON MOORE, SAMUEL JACKSON, and GEORGE W. NORRIS, *Censors.*

Dr. D. FRANCIS CONDIE, *Secretary.*

Dr. J. RODMAN PAUL, *Treasurer.*

Dr. JOHN NEILL, *Curator.*

The Censors reported, that they had examined the accounts of the Treasurer for the year ending June 1, 1853, and upon comparing them with his vouchers found the same to be correct.

The Library Committee, through its chairman, Dr. Francis West, reported as follows:—

The Committee on the Library beg leave to report, that during the year that has just terminated, nothing worthy of special notice has occurred in relation to the condition of the College Library. The increase in the number of works on its shelves, by purchase and donation, has been in about the ordinary rate, and they at present constitute quite a valuable collection, especially of the older medical writers and of the professional journals of the United States, to which it might be supposed that the Fellows of the College would desire more frequently to resort than they have hitherto done.

The collection of books belonging to the late Philadelphia Medical Society still remain in the custody of the College, and are available for the use of its Fellows.

Several bound volumes of journals have been placed upon the shelves within the year.

On motion, the annual appropriation for the Library was dispensed with.

The Secretary announced that since its last meeting the College had lost, by the death of Dr. NATHANIEL CHAPMAN, the oldest of its recently surviving Fellows, and offered the following resolution, which was unanimously adopted:—

Resolved, That a committee be appointed to prepare resolutions expressive of the feelings of the College in reference to the loss they have sustained by the death of their late distinguished Fellow, Nathaniel Chapman, M. D., and that one of the Fellows be appointed to read before the College a biographical memoir of the deceased.

Drs. BELL, RUSCHENBERGER, and WEST, were appointed the Committee on Resolutions, and Dr. ISAAC HAYS was nominated to prepare and read the biographical memoir.

Dr. COATES read the history of a

CASE OF TEDIOUS LABOR, IN WHICH THE TINCTURE OF CANNABIS INDICA WAS EMPLOYED.

Tedious labor; one pregnancy at 19–20 years; the next at 35–36; frame large, rather powerful, but endued with much nervous susceptibility, with uncommon acuteness in perceiving and describing internal sensations; great exertions and mental anxiety near the time of expected labor; anteversion; preparatory pains severe for three days; commencement of labor pains, and continuance for thirty-six hours; uterus propelled low, but with insufficient dilatation; cessation of pains for eighteen hours; recurrence severe and irregular, not tending to expulsion, for eighteen hours more.

Administration of cannabis indica; in three hours, or sooner, pains regular in their character; in five hours, dilatation steady and progressive; delivery in eleven hours; a good recovery; child vigorous.

—— ——, of the age and constitution recited above, with hair brown; person inclining to meagre; was married at eighteen, and delivered of a healthy boy at nineteen. Of the phenomena of this labor I have no written record. I recollect that it was slow, but without accident; and that her imagination had been excited very much, and to a very troublesome extent, in regard to her symptoms, during her pregnancy. After a rather long lactation, she fell into a somewhat peculiar state of health; and never again became pregnant until the occasion, the result of which I am about to narrate. She had her catamenia rather in excess, and almost always at the interval of about three weeks. She was subject to a leucorrhœa, easily checked by lotions and occasional injections of acetate of lead; the os uteri irritable; sometimes touched with nitrate of silver.

Her health was in general good; but being a person delicately cared for, she had an unusual acuteness, and, in some instances, exactness and correctness in describing her internal sensations. An example of this may be taken from her account of her feelings after quickening. "She thought it could not be quickening, because it felt exactly as if the intestines were moving about at

intervals, crawling like worms." It was her habit to use strong language in describing her feelings. It is possible that her anatomical exactness may have been cultivated by witnessing numerous and minute cross-examinations made by a physician in her family, for the purpose of obtaining accuracy in discovering the seats and extent of the ailments for which he was consulted.

Her catamenia appeared, for the last time, Sept. 21, 1852. My estimate of the plausible, average presumption of her time of confinement, was July 1st; or nine months, and one-half of three weeks, assumed at ten days; her delivery took place June 27th.

During her second period of pregnancy, till within a few days of the close, the varieties in her health, differing from what I have above related, were not very remarkable. The morning sickness was severe, with much vomiting; and did not entirely disappear after the fifth month. It returned very seriously in the beginning of the seventh. She did not emaciate much; and, in the latter half of her pregnancy, under a tonic treatment, her flesh, color, and strength increased. The abdominal tumor was not very large. For three or four weeks before the close, she had observed the uterus to gravitate lower, and a corresponding change was visible externally; the secretion of mucus was perceptibly increased.

On the 20th of June, 1853, I was called to her husband, and found him laboring under a severe attack of bilious fever. In nursing him, Mrs. —— had lost two or three nights' sleep, and experienced considerable fatigue and anxiety.

On the 24th, at 2 P. M., she requested my attention from a belief that she was in labor. She had had premonitory contractions for three days. A large protrusion, in which the outline of a head could be evidently felt, but without any overlapping of the parietal bones, occupied nearly the whole upper surface of the vagina, and the resistance of bone was perfectly distinct, although covered with a thick membranous stratum, which appears to have included the anterior part of the developed cervix. The position was judged to be, as it eventuated, Baudelocque's first. At the anterior extremity, a thicker and more salient soft mass intervened. The os uteri could not be discovered. The rectum, which had been carefully emptied, was distinctly felt, flattened and contracted. Small quantities of fluid were discharged from time to time, with

and without volition, in which, from the violence of the pains, and from the diminished size of the soft protruded mass, I thought there were occasionally contained dribblings of the liquor amnii. In this I believe I was mistaken, as I could get to see none that, either to sight or smell, was devoid of the urinary character, and as the soft tumor ultimately turned out to contain the bladder. The externally low situation of the protruded portion of the abdomen, characterizing anteversion, undeniably existed, but was not strongly marked.

In the early part of the night, the posterior lip of the os uteri became tangible, in the form of a transverse fold, near two fingers' breadth long, only distended during the height of a contraction. The anterior lip was effaced; and could scarcely be distinguished from the chorion, except by its redundancy and roughness. Both were as far back as could be reached. The patient was directed to lie as much as possible on the back; a change evidently productive of advantage. Soon after daylight, the soft anterior mass protruded, during the intense stage of several successive contractions, quite through between the labia externa, separating these by a finger's breadth. A drop or two was the utmost amount of blood discovered. The pains then gradually subsided, and became entirely ineffective, leaving the width of the posterior lip not sensibly increased, and the uterine tumor within less than two thicknesses of the finger from the coccyx.

About 11, on the 25th, the case was examined by Dr. C. D. Meigs, whose judgment and estimates differed from the preceding only by judging that the os uteri was dilated about a finger's breadth and a half; an estimate which does not appear to me incongruous with what I have related. An opiate enema was given.

About night the patient experienced, in frequency and intensity, the premonitory pains she had undergone; she got but little sleep, partly, it would appear, from the visible alarm of her friends.

About day, on the 26th, contractions similar to those of the 24th returned. She lay on her back; the os uteri was brought much more forwards; the escape from the vulva of the anterior tumor was not observed; and she suffered somewhat less. This continued till about 11 at night, without visible advancement of the tumor; the os uteri scarcely any larger; its posterior labium

scarcely ever distended, even at the height of the severest pains. She continued to discharge her urine frequently, in small amounts. Efforts at stool were followed by very small evacuations, and left a minute hard mass perceptible in the rectum. It was then that the cannabis was administered; fifty-seven hours after I was called to the case as one in which labor had actually commenced.

I gave her five drops of O'Shaughnessy's tincture, and retired to sleep in the house. At 2 A. M., on the 27th, the pains appeared to me quite regular; and the patient described them as forcing. I did not examine per vaginam, in consequence of the great number of times I had performed that unpleasant operation without visible result. At 4, I examined; the dilatation was much increased; the usual trifling hemorrhage was exhibited; the anterior tumor was in a great measure effaced; and the labor was steadily progressive. From this time, nothing peculiar occurred in the case. About 10, the dilatation of the os uteri was completed, and the amniotic liquor escaped; the quantity of this was small; delivery was completed at five minutes after 10; the placenta came away in fifteen minutes, with a scarcely perceptible pain; and no accident occurred. She is now, July 5, apparently doing very well.

The child was healthy, of the middle size (not weighed, through a superstition in one of the attendants), and rather more advanced than is general at birth; having some hair; moving its limbs with force; and rolling its eyes so as to give the impression that it looked at the light.

I have narrated this case from a belief that, in the present state of our knowledge of the efficiency of this very promising remedy, the record of such a fact was of use.

It may be necessary with some to state explicitly that I do not mean to intimate or convey the opinion that cannabis indica directly excites or produces contractions of the uterus, as appears to be the case with the fungus of rye. It appears to me that the preceding occurrences can be explained by supposing the cannabis to act as musk, castor, or assafœtida frequently does in other hollow viscera; to restrain excessive and irregular contractions, and enable the contracting organ to combine its efforts more in conformity to a healthy order and a useful tendency and result.

A medical narrative or history cannot aspire to the merit and advantage of *unity*, so highly recommended for oratory. It is a defect, and not matter for praise, if a single leading idea run through the whole piece, as in the case of the orator, to which all others are subordinate. Incidental observations are not only frequently necessary for fairness, truth, and usefulness, but are sometimes of greater value than the principal scope of the memoir. I think two of these worth recording in the present instance.

The disease of the husband was a regular bilious fever, with small remission, caught in a miasmatic district; and it terminated in an equally regular tertian intermittent, accompanied by one chill, and suddenly and efficiently checked by quinine. This occurrence, common enough in America, has been denied by physicians who have been influenced, perhaps too exclusively, by events in hospitals of a different climate.

The second pregnancy, after such a long interval, took place soon after residence for a few weeks at a ferruginous spring (Bath, near Bristol, Pa.); and after a previous treatment with chalybeates.

Dr. CHARLES D. MEIGS related a

CASE IN WHICH ALUM WAS SUCCESSFULLY EMPLOYED TO EXCITE EMESIS IN A PATIENT WHO HAD TAKEN A LARGE DOSE OF OPIUM TO DESTROY LIFE.

Dr. MEIGS was called on Saturday the 20th inst., at 2½ o'clock P. M., to see a young gentleman, between twenty-six and twenty-eight years of age, who, after a drinking frolic, had swallowed, two hours previously, one ounce of powdered opium with the view of destroying his life. A physician of his acquaintance who happened to be present when he swallowed the poison, immediately sent for *thirty grains* of sulphate of zinc, and gave it to him, but without its producing the slightest effort at vomiting. When Dr. Meigs saw the patient he was in a somnolent condition. One ounce of powdered alum was immediately procured, and one-half of it, mixed with a little syrup, was given to the patient, and followed in a few minutes by two or three tumblers of warm water, when copious vomiting ensued, by which a free discharge of the contents of the stomach was induced; after the patient had rested for a short period, the remainder of the alum, followed by two

tumblers of warm water, was given, which caused renewed and free vomiting, by which Dr. Meigs presumes the opium was entirely thrown off. The patient continued still to be very sleepy, but entirely recovered from the effects of his rash act. Dr. M. considered this case worth relating, as evincing the very efficient emetic powers of the alum.

LACTINE AS AN ARTICLE OF NUTRITION.

Dr. RUSCHENBERGER stated that he had recently made trial of lactine, or sugar of milk, in a case of extreme irritability of the stomach, occurring after a profuse loss of blood from menorrhagia. The stomach would not retain any even of the mildest forms of nutriment adapted to the case. Having seen a suggestion in a western journal for the employment of lactine in place of cod-liver oil, and from its being tasteless, believing that it might possibly be tolerated by the stomach of his patient, Dr. R. directed her to take it, first, in small masses, to be gradually chewed and swallowed, and subsequently in larger quantities. It was without difficulty retained, and the patient under its continued use improved greatly—gaining strength, and the stomach resuming its functions.

On motion, the balloting for proposition 42 for Fellowship was postponed until the meeting in October next.

A proposition (43) for Fellowship was presented.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS,

OF PHILADELPHIA.

FROM AUGUST 3, 1853, TO OCTOBER 3, 1853, INCLUSIVE.

Stated Meeting, August 3, 1853.

Dr. C. D. MEIGS, Vice-President, in the chair.

Present, twenty-five members.

The Committee of Publication reported that they had issued No. 1 of the Second Volume, New Series, of the Summary of Transactions.

The Secretary announced the death of Dr. T. D. BRINCKLE, one of the Fellows of the College; when, on motion, it was

Resolved, That Dr. J. V. EMLEN be requested to prepare and read before the College a biographical notice of the deceased.

Dr. R. P. THOMAS read the following history of

A CASE OF ENLARGED PROSTATE.

On the first of July, 1852, I was called to a gentleman, aged seventy-four years, who was said to be laboring under gangrene of the bladder. His history previous to that period gave evidence of the gradual enlargement of the prostate gland. Thus, for two

or three years, he experienced difficulty in urinating, the water passing away slowly, but usually without pain. At times, however, after exposure to cold or moisture, its emission was accompanied by pain, the discharge being scanty, high-colored, and filled with bloody mucus. Confinement to the house, for a few days, generally proved sufficient to dispel these unpleasant symptoms without any active treatment.

About the commencement of that year (1852), his disease assumed a more determinate form. Positive inflammation of the bladder took place, and his physician, an eminent Homœopathist, was called in. He found it necessary to resort at once to the catheter, and its use, from that time forward, could never be discontinued. For six months the patient was confined to the bed, being critically ill for several weeks, the diagnosis of the case being inflammation followed by gangrene of the bladder. On the morning of the 30th of June, the symptoms were considered more encouraging, but still fears were entertained and expressed that the gangrene might terminate fatally in less than three days.

In the evening of the next day, I was requested to take charge of the case. I found the patient sadly annoyed with a constant desire to urinate and defecate, and learned that his bowels were opened upon an average once in ten days. He was in the habit of straining ineffectually by the hour on the stool. His pulse was one hundred, and moderately full; tongue slightly furred; skin soft and warm; abdomen tense, tympanitic, and quite tender on pressure; orifice of the urethra red, swollen, and inflamed; appetite excellent. He partook of the different meats, and drank a bottle of claret daily.

From close investigation, it appeared that the use of the catheter was confided to a student, who employed the elastic tubes with a piece of straight whalebone large enough to fit the bores tightly. Whether from unskilfulness, or whether from the inelastic character of the instrument, I know not, but the operation was nearly always attended with the loss of blood from the parts, and thus a constant irritation was kept up, accompanied by fetid urine.

The symptoms of gangrene of the bladder not being very apparent to me, and under the impression that active inflammation of the organ (which certainly existed at one time) had long since disappeared, and, farthermore, that I had to deal with

an ordinary case of enlarged prostate accompanied by an irritable urethra, in a patient worried bodily and mentally by obstinate constipation, I directed him to get up and walk about the chamber, to discontinue the use of anodynes at bedtime, and to take every evening a few grains of rhubarb until the bowels were regulated. By the employment of a silver catheter, with the curved end shorter and more bent than in the one generally used, I soon succeeded in overcoming the irritation, and the urine became lighter colored. The patient, having been taught to operate himself, got out in ten days or two weeks, and was enabled to take moderate exercise daily in the streets until cold weather set in.

In the early part of last December, he had a second attack of inflammation of the bladder, characterized by the usual symptoms. This was treated by strict confinement to bed, abstemious diet, and the administration of digitalis, sweet spirits of nitre, and demulcent drinks, during the active stage; and juniper-berry tea, with five drops of the tincture of cantharides in each draught, to correct the palsied condition of the organ after this stage had passed. To procure sleep, without giving rise to constipation, I directed three grains of the English extract of hemlock to be given at seven and ten o'clock each evening. The attack lasted twelve days. The patient then resumed the use of his catheter, and no farther care was required on my part, other than a general oversight, until the twenty-fourth of March of the present year.

At this time, a large abscess had formed in the pelvis, the contents of which gradually burrowed into and filled the left scrotal sac, communicating also with the bulbous portion of the urethra. At least a pint of thin, ichorous pus must have escaped after the scrotum was punctured, whereby the patient was much debilitated; so much, in fact, as to incapacitate him ever afterwards for introducing the instrument himself.

During my tri-daily visits in the following three months, I had a full opportunity of testing the relative irritation caused by the silver, the gutta percha, and the varnished gum catheters, when employed with equal care and dexterity. The patient exhibited a marked preference for the silver tube, and towards the last would not permit the use of any other. The gutta percha is also an admirable instrument, gradually becoming moulded to the

shape of the passage, and thus admitting of being employed without a wire. Its durability and want of irritating properties are highly in its favor where a tube is to be retained for some time in the urethra.

In this particular case, the common elastic catheters did not answer, for unless the wire was thick and strong, much difficulty was experienced in penetrating the prostate gland. On the other hand, the withdrawal of the wire from the instrument, however gently performed, almost invariably gave rise to severe spasm, which was rendered the more painful by the presence of a large stone in the bladder.

The suffering caused by this stone gave rise to the question whether any measures should be resorted to for its removal. But the advanced age of the patient, his enfeebled mental and bodily condition, the ascertained existence of an enlarged prostate, and the tendency to inflammation, determined the point negatively.

In the period referred to, there were a gradual failing of the powers and emaciation, though the appetite continued good, the bowels regular, and the functions natural.

In the afternoon and evening of July 10, the pulse ran up from eighty-seven to one hundred and forty, the skin became hot and dry, the abdomen very tender on pressure, the urine scanty and bloody, constipation, and no appetite. The third attack of inflammation of the bladder had taken place. Its course was rapid. On the eleventh he was slightly comatose, and he died on the morning of the twelfth, forty hours after the first decided symptoms. Little treatment was resorted to beyond stimulation. During the whole period of his illness, nineteen months, the catheter was used three times daily.

Examination twelve hours after death.—Body very thin. Abdomen slightly tympanitic. Heart unusually perfect for the period of life. Some fatty deposit on the exterior, and a cartilaginous deposit on one of the aortic semilunar valves. Otherwise sound. Lungs exhibited the usual grayish appearance. No signs of tubercles. In the lower lobe of the left lung there were two cavities—one circular, three-fourths of an inch in diameter, the other much smaller. Both were surrounded by a hepatized mass. A few old adhesions between the pleurae were noticed. Stomach slightly injected in a stellated manner. Liver healthy in appear-

ance, but much smaller than usual. Spleen shrivelled like a washerwoman's hands, about three inches long, and one and a half thick. Bowels exhibited no traces of disease. Kidneys of the ordinary size and character. All of the peritoneum above the iliac regions was smooth, shining, and free from vessels. The part surrounding the bladder and rectum was thickened, rough, and red. Old bands extended between these organs and from the sides of the pelvis, while bands of soft, recently effused lymph glued the same parts to the cæcum, appendicula vermiformis, small intestine, and sigmoid flexure of the colon. The bladder (as seen in the specimen) has no one of its coats perfect. The muscular coat is well developed, particularly on the posterior parts, where large bands of fibres are found. The mucous coat is rough and thick. A flattened spheroidal calculus, an inch and a half in its longest diameter, by one inch and a quarter in the shortest, and weighing (when dried) just one ounce, was removed from its cavity. It belongs to the triple phosphate of magnesia and ammonia group. The prostate gland is nearly double the usual size; but the most prominent enlargement is in the third lobe, which stands up like the nipple of a nursing woman. Between the bas-fond of the bladder and the rectum, the sac of a large abscess remains, which is formed above by a thickening of the areolar tissue, and the peritoneal membrane reflected from the one to the other. This opens inferiorly into the scrotum, just behind the membranous portion of the urethra. No passage was observed from the urethra into this sac, notwithstanding three months before his death a catheter could be passed into it just at the bulb. In fact, it was very difficult at that time to introduce an instrument into the bladder without passing a finger into the rectum to resist the descent of its point, and to act as an artificial bulb to direct it upwards into the membranous and prostatic portions of the canal. The vesiculæ seminales were so changed in character by the presence of this abscess, that it was difficult to recognize them in the thickened mass that occupied their position.

Dr. W. JEWELL presented the following history of

THE FEVER PREVAILING IN THE VICINITY OF SOUTH STREET WHARF.

During the past month (July) our usually healthy city was thrown into a state of great excitement, from a suspicion that yellow fever, with its fearful concomitants, threatened once more, after an absence of the third of a century, to find a "local habitation and a name" in our midst.

A careful investigation into the circumstances giving rise to this alarm, has resulted in the development of the following facts, having a direct bearing upon the origin and history of this much dreaded visitation:—

On the 25th of June last, the barque Mandarin, Capt. R. N. Campbell, sailed from Cienfuegos, Cuba, for this port, all in good health, with a cargo of sugar, molasses, and cigars. Her crew consisted of twelve men. On arriving at the Lazaretto, July 12, after a passage of seventeen days, she was visited by the officers at the station, and, on oath, the captain reported "cases of smallpox and fever" at Cienfuegos when he left. That he had lost two of his crew on the passage with fever. The statement of the Lazaretto physician is, that "the crew, numbering ten souls, were examined and proved to be in good health; notwithstanding this, it was considered prudent that the barque should be detained until thoroughly ventilated, cleansed, and fumigated; the bedding and clothing of the deceased sailors were destroyed, the vessel whitewashed and fumigated in every part with chloride of lime, the bedding of the crew aired, and their clothing washed; she was detained an entire day; and, before being allowed to proceed to the city, all on board were separately and minutely examined; all hands were on duty, and apparently free from disease. The captain spent a portion of the day on shore, and before being permitted up, declared on oath that 'all on board were in good health,' and that no sickness, except that resulting in the death of the two seamen, had occurred during the voyage."

On the evening of the 13th, the Mandarin reached the city, and came to at South Street Wharf. On the 16th she was hauled up to the lower side of the first pier below Lombard Street, where she disch[illegible]rgo. The crew having been previously

discharged, the captain and mate remained by her, sleeping on board. On Wednesday morning, July 20, seven days after her arrival, she dropped down to the lower side of the first pier above Almond Street (her several positions being designated in the accompanying diagram), where she remained until the 26th, when she was removed by order of the Board of Health to the cove below the Navy Yard, from whence, on the 28th, she was remanded to the Lazaretto, in order to undergo a more rigid and thorough purification.

There was no development of disease of a malignant type in the vicinity of where this vessel lay, as far as has been ascertained (and the strictest inquiry has been instituted by Dr. Gilbert, the Port Physician, to whose politeness we are indebted for many of the facts here recorded), either before or during the time of discharging her cargo, and it is still to be made known that any of her sailors, or any of the laborers employed in removing her cargo, have since been sick.

There appears to have been no cause for alarm until the cargo was out of the vessel, when it was noticed that a very offensive smell proceeded from her hold. After she dropped down to the pier at Almond Street Wharf, on Wednesday morning, the 20th, the stench became intolerable, especially whenever the pumps agitated the bilge-water, contained under the limber planks or flooring of the hold.

The first case of suspicious fever which occurred in the neighborhood was on Tuesday, the 19th of July, the day before the Mandarin left her position at Lombard Street for Almond Street wharf—Joseph Sharp, a young man, eighteen years of age, who drove a furniture car, and whose stand was on the upper side of South Street wharf. This case proved fatal on the 26th, seven days after the inception of the disease. He died at the corner of Almond and Swanson Streets.

The next case was that of Capt. George Robinson, of the British brig Effort, which vessel lay in the Lombard Street dock, next above the pier where the Mandarin discharged. Capt. R. slept on board his brig, but took his meals at the Champion House, kept by Mr. Charles Koehler, near the N. W. corner of South Street and Delaware Avenue. He sickened on Wednesday, the

20th, and died at the Champion House, on Saturday, the 23d, at 3 P. M.

On the evening of the same day, the 20th, Mr. Koehler's son, aged nineteen, a ship-carpenter, who passed daily along the wharf in going to and from his business, took sick, and died on the 27th, at his father's, the Champion House, where he boarded.

G. W. Kerkeslager, who kept the Red Bank Ferry House, on the S. W. corner of South Street and the Delaware or Wharf Street, was the next victim. He was taken on the afternoon of Wednesday, the 20th, and died on the 25th. His wife, Mrs. Kerkeslager, was taken on the same evening, the 20th, and died on the 26th.

Charles Burrows, the second mate of the barque Mazeppa, lying on the north side of the pier first below Lombard Street, where the Mandarin discharged her cargo, sickened on Wednesday evening, the 20th,* was removed to the Pennsylvania Hospital on the 22d, and died the same night.

Frederick H. Kellog, mate of the Mandarin, was taken sick on Thursday, the 21st. On the 23d, was removed to the Pennsylvania Hospital, and died the following day.

The next one attacked was Fanny Martin, a maid-servant at Mr. Koehler's, Champion House. She sickened on Thursday, the 21st, and died on the evening of Tuesday, the 26th. On the same day, another son of Mr. Koehler, aged seventeen, and a daughter, aged nine, both took sick of the fever, but recovered in a few days.

Honora Stanton, residing at No. 16 Little Water Street, above South, was taken sick on Friday, the 22d, and died on the 27th.

Silas Green, a laboring man, at No. 21 Little Water Street, took sick on Saturday, the 23d. This man came from the country on Wednesday, where he had been for several weeks. On Thursday and Friday evenings he had visited the avenue, and sat for an hour or more on the wharf at Almond Street, where the Mandarin lay. He was not sensible of any bad smell. Recovered.

Capt. R. N. Campbell, of the Mandarin, took sick on Friday,

* The account given by Burrows, at the hospital, was that he sickened on the 17th, but the above date was procured by Dr. Gilbert at his boarding-house, and is no doubt correct.

the 23d, and was removed to Mr. Clement's Hotel, Delaware Avenue, between South and Lombard Streets. Recovered.

On the 25th, John Shellcott, steward, and John White, mate of the brig Effort, already alluded to, were taken sick on board that vessel, lying at Lombard Street dock. On the 27th, they were removed to the Pennsylvania Hospital, where John Shellcott died on the 30th; but John White recovered.

Capt. David Murray, of the brig Reform, lying on the north side of the pier above Almond Street wharf, where the Mandarin lay last (see diagram), was taken sick on the 26th, and on the 29th entered the Pennsylvania Hospital. On the 1st inst. he was doing well. Recovered.

James Markley, another of the crew of the Effort, was taken sick on the 27th, removed to the hospital on the 29th, and August 1 was reported doing well. Recovered.

A man about fifty years of age died on the night of the 27th of July, at No. 8 Little Water Street, said to have been with yellow fever; but, upon strict inquiry, there is not a doubt but that his death was from *typhoid* fever, caused by intemperance and exposure.

Between the 19th and the 27th of the month (July), there were other cases of sickness in the neighborhood of South Street and the avenue, but those above enumerated are all the deaths that are known to have taken place, and all the cases of disease, as far as could be ascertained, that bore any resemblance to fever of a malignant grade.

The following are the pathognomonic symptoms as exhibited in several of the cases of yellow fever as furnished to Dr. Gilbert and the writer by the physicians in attendance.

Jos. Sharp, æt. 18, sickened 19th, died 26th July. Fever without remission until end of third day; then prostration, without reaction; sallow skin and eye.

Capt. Geo. Robinson, of brig Effort, taken with fever 20th; died 23d. Fever without remission for thirty-six hours, then prostration without reaction; black vomit, hemorrhage from mucous surfaces, and bronzed color of skin.

G. W. Kerkeslager, sickened 20th, died 25th. Excruciating pain in loins; fever without remission for three days, when pulse

became natural and sank; black vomit, and sallowness of conjunctiva.

Wife of last case, sickened two hours after, and died twenty hours after her husband. Symptoms the same, except no black vomit.

C. Koehler's son, aged 19, sickened 20th, died 27th. Pain in loins; no remission of fever until end of third day; yellow skin, black vomit, hemorrhage from mucous membranes.

Maid at Koehler's, sickened 22d, died 26th. Symptoms same as last case, except the yellow skin.

Younger son of C. Koehler, aged 17, taken 21st; and daughter, aged 9, taken same evening. Febrile excitement of the same character as the others; abatement on third day, followed by reaction and recovery.

Case of Hannah Stanton. Could not discover any symptoms of yellow fever in the account of this case as given by the husband, family, and neighbors, nor did her body after death present any symptoms favorable to such a view. The certificate of her physician, Dr. Gegan, said *bilious fever*, although the doctor insisted upon it that she had black vomit.

Silas Green, taken on the 23d. Fever without intermission for several days, with vomiting of bilious matter, and considerable gastric distress; intense pain in the head, back, and limbs; fever abated on the 26th, and recovery was rapid.

Capt. R. N. Campbell was attacked on the 23d. Symptoms were accompanied by headache; fever without remission for several days; nausea, without vomiting; was convalescent on the 27th.

We are not advised that the treatment in the above cases differed particularly from the usual method pursued in our ordinary bilious fevers, unless by the early introduction of decided doses of quinia in several of them.

Of the cases treated in the hospital, Dr. Gerhard has furnished the following very brief but emphatic report:—

"DEAR DOCTOR: I inclose you a list of cases of *yellow fever* admitted into the hospital; two of them were from vessels from Cuba, the others were from the English brig Effort, lying near the Mandarin, and one from the Reform, lying in the same neighborhood.

"Two of the fatal cases came into the hospital dying; one had black vomit, the other had the same black secretion contained in his stomach. The steward of the Effort had abundant black vomit in the last twelve hours of his life. These cases have all been genuine *yellow fever*, bearing no resemblance to any other variety of febrile diseases.

"The examination after death, in the three cases, gave us nothing but the usual lesions; that is, the peculiar yellowish hue of the liver, coupled, generally, with a little gastritis and a slight enlargement of the spleen.

"All of them had a yellowish hue, and one was exceedingly jaundiced. The treatment we adopted was quinia in large doses, together with cupping in some cases.

"Striking out the two cases that came in dying, we have lost one out of four."

Before the arrival of the Mandarin, and up to the 19th of July, the day on which the first case of fever occurred, the vicinity of South Street and the wharf, as well as the entire city, enjoyed its usual degree of health. Certain it is, that no epidemic was prevalent. For the week ending July 9, the deaths in the city and liberties were 229, and only one death from fever of a bilious type. For the week ending July 16, there were 206 deaths, including one from intermittent fever. For the week ending July 23, there were 218 deaths, of which four were from fever. Three of these were in children; one was recorded fever, one bilious, one congestive, and one remittent.

As yet, no one with whom we have conversed has ventured to intimate a doubt as to the agency of some uncommon and virulent poison, diffused through the atmosphere, as the pestilential cause of the malignant or yellow fever, a few cases of which have made their appearance recently in the vicinity of South Street wharf.

The essential character and origin of this poison may afford an opportunity for the speculative inquirer to indulge anew, either in an effort to demolish some favorite, though long established, yet not the less false theory of the origin of malaria, or to build upon the ruins of theories, once accredited as ingenious and popular, some more modern system of causation, which, as we advance in medical science, may be destined to meet the fate of those

which have preceded it, however elaborately and industriously they may have been exemplified and sustained.

But, while we leave the discussion of this subject to others, it will not, we conceive, be questioned, when all the facts are clearly and minutely examined into, that this poison, whatever may be the nature of its character, must in part be ascribed to a morbid effluvia generated under the limber planks in the hold of the barque Mandarin, from the putrescent state of her bilge-water.

Upon the first glance at the Mandarin, and the history of her voyage previous to her arrival at Philadelphia, the advocates for a contagious germ for yellow fever, or, in other words, a principle emanating from the sick, and capable of being conveyed from one person to another, as the focus for the fever which has threatened our city, may imagine they have discovered another instance in support of their favorite theory. This, however, we are persuaded, can hardly be the case, although we are desirous that a careful review of the facts connected with this ill-fated vessel should speak for itself.

The Mandarin left Cienfuegos on the 25th of June, with a healthy crew. No *epidemic* was prevailing there when she sailed, although the captain, on oath, admits that a "few cases of small-pox and fever" did exist. He states that his crew lived on board the barque while in port, anchored off the town, were seldom on shore, and, as far as his knowledge extended, none of them had visited among the sick.

The captain admits that the hold of his vessel had often been in a foul condition, as all vessels were that carried cargoes of sugar and molasses. Eight days out from Cienfuegos, July 3, one of the seamen sickened with fever, and died on the 7th. On the ninth day at sea, July 4, another took sick with fever, and died on the 9th, being the fifth day of his illness. This last man was thrown overboard after the vessel was within the capes of the Delaware.

On the 12th of July, seventeen days from the time of leaving Cienfuegos, she hoisted a whiff on approaching the Lazaretto, for a visit from the doctor. She remained at the station one day, to undergo a certain amount of cleansing, as a precautionary measure only, there being at the time no sickness on board.

On the 13th, she was permitted up, and at Lombard Street

wharf proceeded to unload. The seamen were discharged, and, up to this date, we are yet to learn of any one of the eight having had any sickness; nor can we ascertain that any of those who worked on board, during the time of her discharging cargo, have either died or sickened.

Not a case of fever, supposed to have had its origin from the malaria arising out of the foul condition of the bilge-water of the Mandarin, occurred until the 19th of July, six days after her arrival, and not until subsequently to the cargo being discharged.

All the cases of fever known to have taken place up to this date, August 3, seventeen in number, and in the vicinity of the Mandarin, occurred between the 19th and 27th of July. Of these eleven, nearly two-thirds, died.

The poison appeared to be most active between the 19th and 22d. During this interval, twelve cases were reported, and of these ten died.

Of the seventeen cases recorded, we have no direct evidence of the existence of black vomit but in eight, and all of these perished.

On the 20th of July, the Mandarin was warped down to Almond Street wharf, below South Street, about three hundred yards from her berth at Lombard Street.

All the cases that have occurred up to this date, either resided in, or did business in the vicinity of South Street wharf, nor is it known that any case originated below, or south of where the vessel had been last moored, nor has any case come within our knowledge north of Lombard Street.

The prevailing winds during the week ending the 27th, varied from north-north-east to south-east and south, while the average gauge of the thermometer was 79½°.

From all the facts above recited, we may be warranted in drawing the following conclusions:—

1. That no disease of a malignant type was prevailing in our city previous to the arrival of the Mandarin.

2. That none of the seamen discharged from the Mandarin have sickened.

3. That none of the laborers employed in unloading the Mandarin have taken the disease.

4. That the fever did not develop itself until after the cargo was discharged; when, it is believed, the noxious emanations which

had been latent in the hold, under the limbers of the vessel, had an opportunity (acted upon by certain exciting causes, as heat and moisture) to disseminate itself, and, coming into contact with other elements of decomposition existing on shore and in the docks, soon poisoned the atmosphere of the immediate neighborhood where the barque lay moored.

5. That in no instance can the disease be traced to any individual, except among those who either visited or resided in the immediate vicinity of South and Lombard Street Wharves.

6. In no case has the disease been communicated to any person visiting, or engaged in attendance upon the sick.

7. Up to this period, not a single instance can be met with, having its origin to the south of where the Mandarin lay last.

DEATH OF DR. CHAPMAN.

The Committee appointed at the last meeting to prepare resolutions expressive of the sentiments of the College in reference to the death of Dr. Nathaniel Chapman, presented the following report:—

The College of Physicians of Philadelphia, through its Committee, Drs. Bell, Ruschenberger, and West, appointed for the purpose, makes the following record of its sentiments on the occasion of the death of Dr. CHAPMAN, Senior Fellow of the College:—

THE fulness of years and failing health of Dr. CHAPMAN, and his consequent withdrawal from the active discharge of his professional and social duties, gave, like the twilight that precedes the gloom of night, unmistakable notice of his approaching departure. The melancholy event thus anticipated has occurred; and this College now mourns the loss of its venerated and oldest member, of him in whom was blended the skilful physician with the kind friend, the instructive writer, and the lucid and emphatic teacher with the paternal adviser.

The great and distinctive merits of Dr. Chapman, as Professor in that Institution with which his name was so honorably connected during nearly half a century, and in which his ascendency was so conspicuous, will, doubtless, be delineated in due season.

They are fully appreciated by numbers in this College, who, in common with thousands from all parts of the United States, listened to his attractive prelections, and formed their medical opinions under his tuition and guidance.

Farther manifestations of his untiring zeal in fostering medical instruction were afforded by his lecture labors, for a period of twenty years, in the Philadelphia Medical Institute, a summer school, of which he was the founder, and from first to last the president.

As editor and journalist, intent on disseminating medical knowledge, Dr. Chapman has strong claims on the esteem of the entire profession in the United States. The periodical created, and for several years conducted by him, still flourishes, the vehicle for a vast number of highly valuable facts and for the advocacy of sound ethics.

Long will the name of Chapman be associated in the memory of the members of this College, and of the community in which he lived, with the amenities that gave a charm and refinement to social intercourse, and with the radiant yet genial wit which illuminated, and quickened into gladness, all whom he approached.

How many can bear willing and grateful testimony to his generous heart and freely giving hand, ever responsive to the calls of friendship and of charity, to the timid request of the youthful student for a temporary loan, and the faltering pleas of old age for permanent support.

In commemoration of so much worth, and as an incitement to the members of this College, and of the profession at large, to follow in the path of their distinguished associate—

Resolved, That a Bust and Portrait of Dr. Chapman be procured and placed in the hall of the College.

The sincere and respectful condolence of the College is, at the same time, offered to the widow and family of the deceased under their bereavement. Also,

Resolved, That a copy of the preceding record be communicated to Mrs. Chapman by the present Committee.

(Signed) JOHN BELL,
W. S. W. RUSCHENBERGER,
FRANCIS WEST.

On motion, the foregoing report was approved, and the resolutions contained therein adopted, and the whole directed to be published in the *American Journal of the Medical Sciences*, and the *Medical Examiner*.

Stated Meeting, September 7, 1853.

Dr. C. D. MEIGS, Vice-President, in the chair.

Present, thirty-four members.

Dr. HEWSON presented to the Library
Practical Observations on Aural Surgery, &c., by W. P. WILDE.

Dr. JEWELL presented the following additional remarks on—

THE FEVER PREVAILING IN THE NEIGHBORHOOD OF SOUTH STREET WHARF.

Since our communication of August 8, read before the College, on the subject of yellow fever in this city, we have come into possession of some additional particulars, and a number of new cases that are well authenticated, and beg leave to submit them for your consideration.

On the 26th of July, as already stated in our first communication, the barque Mandarin, by order of the Board of Health, was taken in charge by the health officer, Wm. McGlensey, Esq., who put on board of her a crew of five men, including the watchman. These men remained on board from the 26th up to the 30th of July, when she was safely anchored inside the island of Little Tinicum, opposite the Lazaretto, and placed in charge of the quarantine master. Neither the health officer nor any of his men, nor did the watchman who remained on board until after her purification and return to the city, experience an hour's sickness.

While at the Lazaretto, where she remained from the 30th of July to the 2d of August, several of her timber planks were re-

moved, but no mud or other collection of filth was found concealed there. She was then scuttled and filled with water, which remained in her twenty-four hours. The holes were then plugged up, and the water pumped out. After this operation, she was thoroughly whitewashed, and in every part of her chloride of lime was freely distributed. During this process, the quarantine master, with several of the barge-men at the station, were on board and at work in the hold, cabin, and other parts of the vessel for several hours during each day—the weather excessively hot, without any inconvenience to their health.

On her return to the city, the 3d of August, she was moored at Noble Street wharf, Northern Liberties, where she remained until near the close of the month; then was removed to the screw dock, Kensington, for repairs; and, on the 6th of the present month, was taking in cargo between Arch and Race Streets, preparatory to a voyage for New Orleans.

No sickness whatever has followed in her track, since she left Almond Street wharf on the 26th of last July.

The population within the district where the disease first appeared, and where it seems to have been almost altogether confined, is by no means crowded. Many of the houses, however, were filthy in the extreme, with dirty yards, and full and foul privies.

The docks along the Delaware line, between Lombard and Almond Streets, as usual, contain large accumulations of offensive mud and other filth.

Upon the authority of a highly respectable shipwright, who, in his official capacity, very carefully examined the Mandarin, we learn that her pumps are so constructed as to render it impossible to remove all the water in her hold. Being a tight vessel, the bilge-water remaining in her will smell in a very few days after pumping her clean. His language is: "If you draw those pumps every five minutes in the day, there must remain in her twelve inches of water. My opinion is, that the pumps do not go down low enough; they do not go down within twelve inches of the keel, whereas they ought to be at least eight inches lower."

We present this fact in evidence of the impure state of the hold of the Mandarin, six days after she was pumped clean at the Lazaretto.

In addition, however, to the prevalence of the morbific atmosphere which we have clearly shown developed itself on board the Mandarin—but not until her cargo was discharged—and which so sensibly affected individuals on approaching her when she lay at Almond Street wharf, we must not for a moment conceal the existing causes in the immediate vicinity of South Street wharf, sufficient to justify the supposition of their agency, in the development of disease of a malignant type, when subjected to the high thermometrical influence which prevailed throughout the months of June and July. Not the least mischievous of these causes in the production of an unhealthy atmosphere, was the outlet of the sewer into the dock at South Street ferry, belching forth continually putrid masses of animal and vegetable filth, accumulating around its mouth, and exposed at low water to the rays of the sun, exhaling streams of unwholesome and poisonous gases into the surrounding air. Besides this agent, there was a most foul wharf at the upper side of South Street; a filthy avenue, between Lombard and South Streets, without any properly-constructed surface drainage; numerous damp and confined cellars subject to an occasional overflow by the ebbing and flowing of the tide-water of the Delaware; and various minor causes that might properly be added to the above category, fruitful in the production of atmospherical changes injurious to health.

In summing up, however, there is one prominent feature in the chain of our narrative that must not be passed by without notice, viz.:—

No yellow fever existed in our city until six days after the arrival of the Mandarin; that it broke out immediately abreast of the wharf where she first hauled to, and, although there were existing causes in the vicinity—on shore—for the production of disease, there were "plague spots" in other parts of our city, remote from South Street wharf, where, had the question been asked, we should have unhesitatingly located the first appearance of fever of a malignant type, independent of the suspected existence of a foreign focus of infection, competent to exercise its morbific influence on an atmosphere already tainted.

In presenting the above, it is proper to say that we are influenced solely by a desire to arrive at the true cause for the origin

of the yellow fever in our city. That we are no blind adherent to any favorite theory for the spontaneous or domestic origin of yellow fever, nor yet an uncompromising opponent of those who advocate the doctrine of a contagious principle, capable of being carried about from place to place, and, under a train of favorable circumstances, productive of disease. An honest inquirer after truth, we would disguise no fact, that might tend in any way to elucidate a question so intricate, that for years it has been controverted by the ablest pens in our profession, and yet remains a mystery.

In our first account of this disease, we narrated briefly the history of seventeen cases, bringing them down to July 27, and gave the pathognomonic symptoms of several of them as far as they could be obtained. Since then, we have collected twenty-seven additional cases, that may be relied upon, and presenting, in all respects, the evidences of genuine yellow fever.

The accompanying table embraces the entire list, in their numerical order, since July 19, including the name, age, sex, place of birth, where the disease was contracted, the date of attack, where attended, by whom, the duration of the disease, those that were accompanied with black vomit, those that died, and those that recovered.

From this table we learn that 9 of the cases were under 20 years of age; 18 between 20 and 30; 10 between 30 and 40; and 7 over 40.

Twenty-five were males and nineteen females. Of the whole number, twenty were born in Ireland, four in Germany, five in England, and fifteen in the United States.

Thirty-seven of these cases may be traced directly to the infected district. In four, the origin is doubtful, and in three, no clew could be had as to where the disease was contracted.

Of the forty-four cases, thirty-four died. The mean duration of the disease in those who died was four days; not including, however, Dr. Jackson's case, No. 23, and that of James Genton, No. 30. The former was protracted until the fourteenth, and the latter to the twelfth day.

In twenty-six of the forty-four cases recorded, there occurred the peculiar dark-colored "coffee-grounds" ejection from the sto-

mach, known as black vomit.* This substance, when placed within the field of the microscope, exhibited the true blood-corpuscles, denoting its sanguineous character, with the exception of that in Ellen Parr's case, No. 85, examined by Prof. Gilbert, whose testimony disproves its identity with blood, and consequently throws a doubt on the genuineness of the case. This patient recovered, and was one of the two instances of recovery where the black vomit was said to have occurred.

In eleven of the thirty-four deaths a *post-mortem* was made; in all of which the yellow or ochre-colored liver was detected in whole or in part. In all of them the "coffee-grounds" fluid, or melenic blood, was found, either in the stomach or intestines, with other evidences of a pernicious form of fever.

The mortality, according to the table, has been fearful; equal to 80 per cent., or 5 to 1 of recoveries.†

The sixteenth case in the table‡ was Rosanna McKean, a native of Ireland, a patient of Dr. William H. Hooper, and residing at No. 172½ South Second Street. From her own account, she had made a visit on Monday, three days previous to Dr. Hooper's seeing her, to the corner of South and Water Streets, next door to where two persons had died with yellow fever. We are indebted to Dr. H. for the following symptoms of this as well as those in several other cases, which he kindly furnished for our use:—

"Called to see her at 4 P. M., July 24, 1853; had been ill three days with fever and severe pain in the head and back; found the eyes injected, intense epigastric uneasiness, with great tenderness on pressure; pulse feeble; face dark and suffused; intense pain in the back of neck; tongue perfectly natural in color and to the touch.

"29*th.* Great prostration; vomited during the night a large quantity of a brownish fluid, containing a sediment resembling coffee-grounds. 12 M. Rejected everything taken into the stomach. Resisted all stimulants, gulping up everything by mouthfuls.

* In the seventh case, there was no black vomit before death, but it was found in the stomach at the *post-mortem*.

† By a reference to the accompanying diagram of the infected locality, the precise situation of each case recorded is indicated, corresponding to the number in the table.

‡ The previous cases having been already described.

Intense thirst; the eye at this stage assuming a peculiar pinkish hue; tongue remaining clean.

"30*th*. Sinking. Skin cold and system collapsed. Died at 3 P. M. Before death the eye became jaundiced and the skin bronzed in appearance."

The nineteenth case was James Clements, who attended bar for his father, at Clements's Hotel, on Delaware Avenue between Lombard and South Streets, immediately in front of the wharf where the Mandarin discharged her cargo. He was taken ill on Friday, July 29, and went to his residence, No. 93 Prime Street. Dr. Wm. Klapp, his physician, saw him for the first time on Sunday, 31st, when he was rapidly sinking, and died on Monday, August 1, at 2 A. M. Dr. K. could not obtain any connected account of his symptoms previous to his visit on Sunday, but from the injected eye, deep yellow tinge of the skin universally, and the fatally rapid progress of the case, identified it as one similar to those of yellow fever he had witnessed in the vicinity of South Street Wharf.*

Mrs. Mullen, residing at No. 4 Swanson Street, a patient of Dr. John Gegan, was attacked with malignant symptoms on the 29th of July; the next day had black vomit. Prof. S. Jackson saw this case. On the 3d of August, the vomiting had ceased under the use of a powerfully stimulating acid mixture, and hopes were entertained that she might recover; but during the following day she began to sink, and died on the 5th, at 4 P. M. Skin became very yellow after death.

Mary Bulger, residing at No. 12 Swanson Street (a continuation of Little Water Street) below South, west side, attended by Dr. Gegan, was taken ill on the 30th of July, and died on the 3d of August, with black vomit. This, according to the doctor's account, was a highly malignant case. The premises where she died were in a very filthy condition.

About this time John Haslett, a drayman, whose stand was at

* Dr. Gilbert, the Port Physician, says of this case: "His father informed me that his son had been in delicate health for years. On the 19th of July he had a slight diarrhœa, which continued until the 29th, when he was attacked with pain in the head, back, and limbs; had very little fever; was sensible throughout; expectorated a little blood before his death, which took place on the 1st of August."

This account would seem to strengthen the impressions of Dr. W. Klapp.

Chestnut Street wharf, was taken ill at his residence Christian Street above Eleventh. He was attended by Dr. W. Keating. We are not in possession of particular symptoms, farther than that he had black vomit, and died at St. Joseph's Hospital in three hours after his admission on the 2d of August.

There has been some doubt as to the origin of this case of yellow fever, unless we consent to the proposition, that the influence of the poison had extended its march along the river front to Chestnut Street, and there communicated the disease to Haslett. But as no other case has manifested itself in that vicinity, up to this date, we must either consider it isolated, or endeavor to trace the infection to a location nearer the contaminated district. We have taken some pains to trace out the history of Haslett's sickness, and within a few days learned from his employer, Mr. Christian Ferry, that for several weeks preceding his last illness he had not been well, complaining of his head, and was very drowsy, but did not lay by. Mr. Ferry's drays had not hauled any loads into or from the neighborhood of Lombard or South Street wharf since the 13th of July. But, on reflection, and on reference to his book account, recollected having sent repeatedly one or the other of his men to South Street ferry, on business, during the week previous to Haslett's sickness, and believes that John had been there more than once. He stated farther, that his men were every day hauling loads into Southwark, and that vicinity, from Chestnut Street wharf, and thinks it not unlikely Haslett may have entered the infected district in that way.

Another interesting case, occurring beyond the borders of the infected locality, but which may be clearly traced to an immediate exposure to atmospheric infection, was that of Ann Jane Stewart, residence Tenth Street near Shippen, under the care of Prof. S. Jackson, to whom we are indebted for the following particulars:—

"Miss S. was in good health previous to Sunday, the 30th of July. On the afternoon of the preceding Wednesday, the 26th, she made a visit to Swanson Street near South on business, and remained there for some time. Returning home, she continued well until the 30th, when she complained of intense pain in the head and limbs, great distress over the epigastrium, oppression and nausea, with fever, continuing without intermission until

Wednesday evening, the 3d of August, when the fever abated. From that time up to the period of her death, on the 13th of August, fourteen days, there was no sensible reaction. The nausea, sense of oppression about the heart, and extreme tenderness over the epigastrium continued unabated until she died, accompanied with a purging of yellow and bloody fluid. Her pulse remained about 130 throughout, while her skin, from the commencement of the attack, was of a dark yellowish hue. The extreme heat of the weather, during the three last days of her life, tended greatly to prostrate her already enfeebled system, and, in my estimation, hastened her death."

It deserves a passing notice, that from the date of the last case, July 30th, there was a temporary cessation of the disease for the space of seven days. No new case occurred again until the 6th of August, when the evidence was clear, that the epidemic influence not only lingered among us, but that it was occupying more territory, and taking a wider range than was at first supposed to exist. From this date, August 6th, it will be perceived as we proceed, that a number of genuine cases of yellow fever happened a short distance beyond the limits of the first twenty-two cases, as embracing the infected district.

Mary Williams, the next case, an Irish woman, aged twenty-two years, was also taken ill away from the locality of the infection, and doubts arose as to the source of her sickness. An accidental occurrence, however, shed the clearest light upon its origin, and satisfied us that she had fairly contracted her disease in Swanson Street below South.

Mary boarded for a number of weeks with Mrs. Mary Bulger, at No. 12 Swanson Street, who died of yellow fever on the 4th of August. On the 3d, the day before Mrs. B. died, Mary Williams left the house, returning the next day, the 4th, for her clothes, but refused to see the body of Mary Bulger. From hence she went to No. 338 North Front Street above Noble. Dr. A. C. Bournonville, who was called in, has politely furnished us with the following statement: "She came to this place on Thursday evening, 'as well,' according to the language of her room-mate, 'as she ever knew her to be.' She first complained on Saturday, after dinner; I did not see her until Monday. Found her laboring under fever, with great suffering from distress over the epigas-

trium, cramps in legs, pain in head and back, eyes injected, red, face flushed, tongue coated white, and her body covered with a petechial eruption. Her symptoms not improving, on Tuesday she was admitted into St. Joseph's Hospital."

On Wednesday, as we learned at the hospital, her fever gave way to prostration. On Thursday, her skin became very yellow, accompanied with extreme sensibility on the slightest touch, the petechia increasing. On Friday, the 12th, she began to throw up a peculiar dark-colored fluid, in large quantities, which left the "coffee-grounds" sediment on the clothes; and at 10½ P. M. she died, six days from the date of her attack.

The *post-mortem*, made twelve hours after death, revealed the peculiar "box-wood" colored liver, congested appearance of other viscera of the abdomen; extreme yellowness of the adipose matter; softening of the mucous membrane of the stomach, and a deposition thereon of a dark, muddy-looking substance. A slight puncture of the stomach, made accidentally during the dissection, deprived us of the opportunity of examining its fluid contents. Neither the brain nor lungs were examined.

The next case occurred at No. 37 Almond Street, between Front and Second, on the 9th of August, in the person of John S. Williams. A brief statement has been kindly furnished by our friend Prof. Mitchell, and is, in substance, as follows:—

John S. Williams, aged twenty and a half years, native of Chester, Pa., trade, carpenter. Returned from a short visit to Port Deposit, Md. (which place he represented as unusually healthy), on the 18th of July, in good health; continued well until the night between the 8th and 9th of August. About 4 A. M. on the 9th, felt a severe headache, pain in the lumbar region, legs, and in the finger and toe-joints. At 8 A. M. had a chill, followed by fever. About 6½ P. M. vomited, at first what he had recently swallowed, then frothy matter, but no bile; vomited again about 7 P. M. Took Epsom salts at noon on the 9th, which purged him twice during the afternoon and twice at night.

Dr. J. V. Herriott saw him for the first time on the 9th, about 8 P. M.; describes his pulse one hundred and twenty-nine, and regular; headache, backache, and general soreness; eyes injected, and patient very restless; began to be yellow on Wednesday, the 10th; considerable prostration; pulse one hundred and six;

showed delirium at 9 P. M. Thursday, the 11th, pulse ninety-two; sallowness increased, and extended to the abdomen; vomited coffee-grounds in appearance at 2½ P. M., and in half an hour again. Died at twenty minutes after 4 P. M., on Friday, 12th of August, having been sick exactly three and a half days, or eighty-four hours.

Dr. Mitchell says: "I saw him on Friday the 12th, at 11 A. M. Yellow skin, most conspicuous on breast and neck; eyes of delicate pink color, slightly streaked with yellow; tongue large, soft, white in middle, with red edges and tips; pulse one hundred and eight, soft and regular; mind muddy; answered correctly when questioned; very tender over the epigastrium and the right iliac fossa. When in *articulo mortis*, the evacuations from his bowels were liquid, and of a darker color than the matter vomited."

Young Williams stated to Dr. Mitchell, that on Monday, the 8th, the day preceding his attack, he had walked from No. 37 Almond Street to Schuylkill Eighth and Market Streets, and returned. On the same day, to and from Apple Street, running north from Brown Street, between Fourth and Fifth Streets, Northern Liberties. In the evening, as was his custom, he resorted to Almond Street wharf, for cool river air. From thence walked with a friend to the Commissioners' Hall, Southwark; made no complaint, had an excellent appetite, and retired to bed apparently well.

He had, on several occasions during the two weeks preceding his sickness, been along the wharves from Almond to Walnut Street, but had not been on board any vessel, nor had he seen or been in the house with any person sick in any form. No *post-mortem* could be obtained.

The two following cases were in Krider's Court, Southwark, a small place running east from Front Street, south of Almond Street, as delineated on the diagram. An exceedingly filthy and ill-ventilated court; the houses are old, confined, and the passage-way is deficient in drainage. On the 13th of August, a woman died in this court from dysentery, after five days' illness. Within a few days, also, a child, from cholera infantum.

Betsey Stephens, aged eighteen, unmarried, was unwell a few days from suppressed menstruation, about the 29th of last month (July). On the 8th of August, was well enough to walk a long

distance into "the Neck." On the 9th, her father had an attack of cramp, and Betsey went in great haste for a physician a distance of five or six squares. This over-exertion and excitement brought on violent fever the same evening. Her physician, Dr. J. Heritage, has furnished us with the following synopsis of her case:—

"My first visit to Miss Stephens was on the 9th of August. She complained of severe pain in the head, back, and inferior extremities; tongue coated and dry, presenting a brownish appearance; skin hot and dry; pulse about one hundred, full and tense; bowels costive.

"I saw her again on the 10th, at 9 A. M. All the preceding symptoms were much aggravated, with the addition of pain in the epigastrium, which was increased by pressure; pulse one hundred and twenty, full and tense; face flushed; conjunctivæ red, and slightly tinged with brown; respiration hurried. At 4 P. M., much worse, tongue darkish-brown, and much dryer; pulse more frequent, but not so full; face flushed, and expressive of the greatest anxiety; stomach exceedingly irritable, ejecting everything, even ice-water; thirst intense.

"At 9 P. M., the only noticeable change was in the matter ejected from the stomach, which now resembled in appearance coffee-grounds.

"At 9 A. M., on the 11th, learned that she had passed a very restless night, vomiting continually. Pulse more feeble; dark fluid discharges, tinged with blood, from the bowels; great prostration. From this time she continued to sink, despite the sulphate of quinia and milk punch, until the 13th, when she died."

Ellen Boland was the companion of Betsey Stephens. She formerly resided at No. 405 South Front Street, near Catharine. About two weeks previous to her last illness, had an attack of erysipelas, from which she recovered. On or about the 4th of August, went to board in Krider's Court, in the house with Betsey Stephens. Here she was taken ill with fever on the 10th, from whence she was removed to St. Joseph's Hospital on the 13th, and died on the 15th, with the symptoms of yellow fever, accompanied by black vomit.

The above cases occurred in the immediate vicinity of the infected district, as originally presented, nor could it be ascer-

tained positively, that either of them had been east of Front Street, between Almond and Pine Streets; an evidence that the influence of the poison had extended south of Almond Street.

We are indebted to the notes of Dr. John Gegan for the subjoined account of a case occurring beyond the infected neighborhood:—

"James Riley, aged twenty-four years, by trade a chairmaker, residing back of No. 25 Union Street, near Second, of temperate habits, worked in Race Street; had no communication with the infected district. Was taken sick on Saturday, August 13th, with chill, followed by fever; pulse one hundred and twenty, strong and active; considerable tenderness over the epigastrium; severe pain in the head; cramps in the legs; eyes injected; tongue furred and soft; stomach irritable; bowels constipated. All the symptoms were relieved within twenty-four hours, by venesection, calomel, and neutral mixture.

"On the 14th, the pulse was one hundred; head relieved of pain; skin yellow universally; tongue thickly coated, white; commenced ejecting black vomit from stomach without effort; the evacuations from the bowels were of a dark-colored matter; epistaxis of dark blood; urine very dark in color; constant thirst.

"Eight P. M., increased yellowness of skin; tongue continued furred; conjunctivæ injected red; vomiting ceased, followed by an abatement of all the symptoms. At midnight the epistaxis returned, with rapid prostration, and he died at 4½ A. M. on the 15th, in forty-eight hours.

"Thirty hours after death the body became quite black in color."

The three subjoined cases possess more than ordinary interest, because of the difficulty in establishing a direct intercourse between them and the infected location, and from the circumstance of their having been sailors belonging to the same vessel, lying at a remote point from the district where the fever first made its appearance.

Oliver Pitcher, seaman, aged twenty-three, from Waldoborough, Maine, and James Genton, seaman, aged nineteen, from Waldoborough, Maine, entered the Pennsylvania Hospital August 15, laboring under yellow fever. The former died on the 18th, while the latter lingered until the 27th.

John Brennock, seaman, aged twenty-eight, from Portland, Maine, entered the hospital on the 18th, and died on the 19th with yellow fever. In two of these cases there was black vomit.

The history of the above cases, as far as we have been able to obtain it, is as follows:—

They were seamen belonging to the schooner Canary, Captain Winchenpaugh, which arrived here on the 9th of August, freighted with lumber from Calais, Maine. She discharged her cargo at the fourth wharf above the Navy Yard, full a quarter of a mile below South Street. About the 12th or 13th, she was taken up to the coal wharves at Richmond, and on the 15th, two of the sailors referred to above sickened, and were taken to the hospital. The third man, John Brennock, who was received on the 18th, did not come directly from the Canary, but from Moyamensing Prison, to which place he had been committed four days previously, on account of a drunken spree.

If these men died from yellow fever, where did they contract it? It is evident that there had not been any yellow fever atmosphere either at Richmond or near the Navy Yard. Nor is there any evidence that the disease could have originated on board the schooner Canary. She was a new northern vessel, four years old, had never been in a southern port, and had no bilge-water in her hold. This testimony is derived from James Genton, one of the men who was at the hospital. Not willing, however, to suppress a single known fact that can shed a ray of light on its causation, we would state that John Brennock, one of the men, arrived in Philadelphia on the 21st of June last, in the schooner Splendid, from Cardenas, Cuba, where yellow fever prevails every year. He returned to his home in Portland, Maine, shipped on board the schooner Canary, and arrived in Philadelphia as already stated. Query—Could the opening of his chest of sea-clothes, and turning out in the presence of his shipmates, Genton and Pitcher, some unwashed and confined garment that he had worn last in Cardenas, on the hypothesis that it may be portable in the form of a tropical germ, and which exotic became reproductive in our atmosphere, furnishing the foci for the disease in these sailors?

A much more rational theory, however, than its foreign importation, in these cases, is at hand, inasmuch as we must resort to inferential evidence to account for their infection. When the

Canary was discharging cargo, at the fourth wharf above the Navy Yard, the crew, on their way up town, being "'long shore men," would naturally keep near the river, and would have to pass through the district of South and Water Street, or may have visited among the sailor boarding-houses or taverns in that vicinity, and there imbibed the disease of which they died. This, however, is all speculation, and must be taken for what it is worth in making out the case.

The next on record is the case of Thomas E. Crowell, Esq., aged thirty-eight, a lawyer by profession, residence No. 266 Front Street, below South. We learn from Dr. John Gegan, his physician, that he was taken ill on Tuesday, August 16, with a severe chill, followed by fever, intense pain in the head, extreme tenderness over the epigastrium, tongue clean. On Wednesday, the 17th, he was ejecting black vomit, and had slight delirium. On Thursday, all his symptoms grew worse, and on Friday, the 19th, he was attacked with convulsions, and died the same day. He had an injected eye and yellowness of skin throughout his sickness.

The three following cases were at No. 76, Penn Street, below South, in the practice of Dr. Jos. Huckel. The house was old, contracted, badly ventilated, and exceedingly filthy, as were all the families, three in number, occupying the premises. Samuel Morrison had died in the same room where these cases lay sick, about two weeks previously, and reported in Dr. Gegan's certificate as bilious fever.

Dr. Huckel informed us that Mary Carrigan, aged seventy, was taken ill on Wednesday, the 17th, with severe pain in the head, violent fever, intense thirst, tenderness all over the abdomen, extreme restlessness and moaning, tongue unusually white, vomited a watery fluid, bowels constipated, red spots over her extremities. This woman died on Friday A. M., the 19th, in forty-eight hours. Appearance six hours after death—skin very yellow, vibices on the extremities, very dark in color.

Her daughter, Mary Carrigan, aged eighteen, sickened same day as the mother, and lay in the same bed. Her symptoms were fever, pain in the head, white tongue, thirst, vomiting of dark-colored watery fluid. On Friday, at 1 P. M., was pulseless, sinking rapidly; mind clear; tongue intensely red, dry, and protruded with difficulty; extreme tenderness over the epigastrium; eyes

injected, and of a pinkish hue; skin over body yellow; had vomited a very dark fluid, but not examined by her physician. She died on the morning of the 20th, 3 A. M.

Edward Carrigan, brother to the above, aged twenty-six, residing in the same room, sickened on the 19th, and died on the 22d. Symptoms similar to those of his mother and sister. Skin yellow, but no black vomit.

No *post-mortem* could be obtained in these cases.

For an account of the next case we are indebted to the politeness of Dr. W. H. Hooper, the physician in attendance. The origin of it, as in that of Riley's, is involved in obscurity, unless the infected atmosphere extended as far west as Third Street.

"*8th Month* 19, '53. Called to see Mary Turner, æt. twenty-five years, at No. 1 Loxley's Court. Found the eye red and injected; great epigastric uneasiness, tenderness on pressure; pulse full and tense, ranging one hundred and ten. Complained of great pain in back of head and neck; continual vomiting of glairy mucus; bowels loose, moved four times during the day. She informed me that she was living with Mr. West, as a servant, at No. 82 Lombard Street, between Third and Fourth, where she sickened; had been sick two days, and had taken a drachm of magnesia.

"*20th.* Pulse feeble; skin cold and clammy; vomiting had not been arrested during the night; continually sighing and tossing in bed. At 1½ P. M., same condition; pulse more feeble; intellect clear; peculiar pinkish hue of the eye. Numerous small spots, injected of a deep red color, made their appearance upon the neck, breast, and arms, as it were in clusters. At 6 P. M. died. The eye and skin before death were slightly tinged of a yellow hue. The matter vomited on the night of the 20th was of a brownish hue, containing a blackish sediment resembling coffee-grounds."

This woman declared to us, at noon on the day she died, that she had not been at any one time for weeks past in the vicinity of the district of South and Lombard Streets, east of Second Street. Had no acquaintances in that neighborhood.

The case of Ellen Parr is one of doubtful character, and yet possesses interest from several circumstances.

According to the statement of her physician, Dr. Hooper, she had "black vomit," and recovered. She took in three days two

hundred and forty grains sulphate of quinia, eighty grains daily, without unpleasant symptoms. Lastly, she resided in Gray's Alley, running from Front to Second Street, between Walnut and Chestnut Streets, and no evidence could be obtained of her having visited the infected district, or its immediate vicinity.

We furnish the history, with treatment, as presented by Dr. H., together with a short statement from Dr. Gilbert, the Port Physician, who visited her after the symptoms began to yield, and who examined the matter thrown from her stomach.

"*8th Mo.* 19, 1853. Ellen Parr, æt. 20 years, native of Ireland, residence back of No. 13 Gray's Alley.

"Found pulse 115, full and tense; tongue whitish; great epigastric uneasiness; vomiting continually; countenance suffused; eyes red and fiery; complained of great pain in the back of the head and back; had been sick only one day. Ordered five grains of sulphate of quinia in solution every two hours, a blister three by four over the epigastrium.

"*20th*, at 8½ A. M. Found the pulse 80, somewhat feeble; vomited during the night a brownish fluid containing a small quantity of brownish sediment. Continued the quinia, with an ounce of essence of beef every hour, and one ounce of brandy made into punch every other hour. 12 A. M., found the vomiting had continued, but only of a yellowish hue. Treatment same. At 5 P. M., vomiting only at intervals, mucus, with a slight deposition of fine powder resembling soot. Treatment continued, with the addition of one ounce of lemon-juice every hour.

"*21st*, 8½ A. M. No vomiting during the night; she said she derived instant relief from the nausea by the first draught of the lemon-juice; pulse 80, more full; tongue whitish, and red at the edges. Treatment continued; brandy discontinued at 1 P. M. No vomiting; pulse better.

"*Monday.* Same condition; treatment continued.

"At 5 P. M. complained of intense pain and buzzing in the ears. Reduced the quinia to two and a half grains every two hours.

"*Tuesday.* Still improving.

"*Wednesday.* The injected eye entirely gone; tongue clean and moist. Quinia one grain every two hours. Essence of beef and lemonade ordered.

"*Thursday.* Convalescent.

"One fact worthy of note was the immense doses of quinia taken for the first three days, viz., two hundred and forty grains in all, without any ill effect. Another, was the injected eye clearing and furred tongue cleaning, in one night."

Dr. Gilbert, who visited her on the 21st, says: "Her case does not appear to me to have been yellow fever. The only symptom which is at all suspicious is the dark matter vomited. This is of a lead color, not black or reddish-black, as in genuine yellow fever. I examined some of its deposit with the microscope, and the peculiar black pigment, as well as blood-corpuscles, found in black vomit of yellow fever, are wanting. There is no yellowness of skin, no hemorrhage, and her mind has been clear throughout the attack. The eyes are natural."

There have been three cases of yellow fever in the Blockley Hospital. Two died and the third recovered. The two that died had black vomit; the one that recovered had no black vomit in the house, but profuse epistaxis. No history could be obtained of two of these cases, prior to their admission, owing to their feeble and exhausted condition when received, except that presented in the permit, viz., that one came from Shippen Lane, Moyamensing, and the other from Front Street below South, in the infected district.

We are indebted to Dr. J. D. Stewart, the principal physician of the hospital, for the accompanying statement.

Cath. Handson, Irish, aged forty, was admitted from Shippen Lane, Moyamensing, August 1. I have been unable to procure any information respecting her prior to admission. When received she was in a state of muttering delirium; general yellow hue of the skin and conjunctiva. A few hours after admission she commenced vomiting a blackish fluid; this continued until death, which occurred the day following her reception, August 2.

A *post-mortem* was made. There appeared to be a general jaundiced hue of the body; the stomach contained a similar fluid to that she had been ejecting; the mucous membrane was softened, and appeared entirely removed from portions of the stomach; there seemed to be general injection of the organs of digestion; the liver the color of rhubarb; the brain was not examined; the

fluid contained in the stomach was submitted to the microscope, and was found to contain blood-corpuscles.

Mary Fortner, Irish, aged twenty-eight, was brought into the house last evening, August 19, from Front Street, between Shippen and South; she died this morning, evidently of malignant fever.

A *post-mortem* examination was made to-day. When admitted, her brain appeared to be unaffected, answering questions intelligently, although with difficulty; her prostration was extreme. When admitted, she had been sick five days; her greatest complaint was extreme tenderness over the epigastric region; previous to death she vomited a dark fluid; upon examination, the stomach was found to contain similar fluid; it was very much injected, but it did not appear to have sustained the same amount of injury as the previous case; the liver was of a bright yellow color; the skin was also yellow. In both of the cases the lungs were entirely healthy. The brain of the last case was examined, although somewhat injected, not to any important extent. We have examined with the microscope the fluid found in the stomach of the last case, and discovered the blood-corpuscles.

The third case was John Reehil, Irish, aged twenty-three, admitted August 22, from No. 145 South Front Street, above Dock, where he had been under the care of Dr. W. H. Hooper, who has offered the annexed history of symptoms.

"Saw John on Friday, August 19, at 5 P. M.; found him in the second stage. The eye red, injected, and yellow; complained of great epigastric uneasiness; tenderness on pressure; continual vomiting and retching. From what I could learn, he had been suffering from a high fever for two days past.

"12 P. M. Great debility; pulse sinking; slight delirium.

"20*th*, 7 A. M. Skin and eye completely yellow; the blister, which had been applied over the epigastrium, on being cut, stained his linen of a yellow hue; greater debility manifest; delirium increased; vomiting at intervals, the matter vomited during the night resembling coffee-grounds, or the lees of porter (to use the nurse's language).

"5 P. M. In the same condition. Vomiting more frequent, but the matter contained nothing abnormal.

"21*st*, 7 A. M. Reaction had taken place; pulse full and tense.

"1 P. M. In the same condition. Vomiting had ceased.

"22*d*, 9 A. M. Pulse more feeble, 78 per minute. Informed by the nurse vomiting had returned during the night, but it contained nothing abnormal; he was delirious during the night; has hemorrhage from the nostrils this morning. Sent at 3 P. M. to Blockley. Continued delirious during the day."

Dr. Gilbert visited this patient, and confirms the statement of Dr. Hooper in every particular, and does not hesitate in pronouncing it genuine yellow fever.

The treatment by Dr. H. was with five-grain doses of quinia every hour, beef-tea and brandy, with stimulating frictions over the body.

We have been informed by Dr. Stewart, chief resident physician of Blockley Hospital, that no quinia was employed in any of these cases while in the house. In that of Reehil, cups were freely used to back of neck and over the abdomen, together with calomel pushed to salivation. This patient had no vomiting from the time he entered the house; that he lost about twenty ounces of blood by epistaxis and the application of the cups, which relieved his gastric tenderness; his stools were gray until ptyalism was effected.

On Saturday last, September 3, we visited Reehil at the hospital, and found him convalescent, walking about the ward, with a good appetite, but unable to indulge it as he labored under ptyalism. The surface of his body was universally yellow, while the conjunctiva exhibited a very deep-yellow tint.

Questioned him minutely in order to learn the origin of his disease, and found that he came to this city very much exhausted from hard work, on Monday afternoon, August 15, from Jersey City, where he had resided for six weeks, on the wharf near North Point. A stranger, he was taken by a boy to the Exchange, from whence, in an omnibus, to one John Smith's Tavern, near the Schuylkill, he thinks. Here he stopped all night, and in the morning went to No. 145 Front Street, near Dock, where he took boarding. All that day, Tuesday, he was strolling along the wharves, as far down as the saw-mills near the Navy Yard, looking for work. On Wednesday he was out again in the same direction, or, as he expressed himself, "a long way below Dock Street, on the wharf," and, on his return, was taken with violent

cramps in his legs, felt very bad, and had difficulty in reaching his boarding-house.

From this statement the inference is natural, if not conclusive, that John Reehil contracted the fever during Tuesday and Wednesday, while passing through the infected neighborhood on his way to the saw-mills. His system exhausted, and predisposed to disease, more readily received the poison, which, from the same cause, developed itself in a few hours in the form of a malignant type of fever.

Bridget Tibley, aged thirty-three years, Irish, died at St. Joseph's Hospital, of yellow fever, on the 22d of August. She resided at Third and Catharine Streets, and spent Friday and Saturday, the 12th and 13th, at No. 221 South Front Street, between Lombard and South, east or Delaware side of the street. On Sunday, the 14th, had a chill. On Wednesday, the 17th, went to the hospital, and died on the 22d, the eighth day of her disease.

Joel Sauteir, aged thirty-six, was admitted into the Pennsylvania Hospital, from a sailor boarding-house in Shippen Street, near Front, on the 20th of August. He had been sick a number of days, and his last voyage was from Cuba. His case presented the usual symptoms of yellow fever, without the black vomit. This man recovered with his skin and eyes jaundiced.

The annexed case was treated in the City Hospital, on Bush Hill, by Dr. J. F. Bird, the physician to that institution, who kindly furnished the notes of symptoms and treatment.

The name of the patient was Mary Gibson, Irish, aged twenty-two years. Resided at the corner of Lombard and Penn Streets, and was sent to the hospital, Wednesday, the 24th of August, the day on which she sickened.

"*Wednesday.* Pulse one hundred and ten; headache; tongue slightly furred, soft, and without tremor; no epigastric tenderness. Gave an emetic of ipecac. grs. 20, followed by calomel, grs. 20, in two powders; in four hours took half an ounce of castor-oil—has acted three times.

"*Thursday*, 10 *o'clock.* Better. Pulse one hundred; eyes slightly injected. Is to take every two hours four grains of calomel, with one-fourth grain of opium. There is no eruption over the abdomen.

"4½ *o'clock P. M.* Pulse one hundred. Continue treatment of morning.

"*Friday*, 12 *o'clock M.* Pulse eighty. Has had several bilious evacuations; capillary circulation very languid; constant nausea. Will take a pill every two hours, consisting of three grains of calomel. Diet—toast water, gum water, weak tea, and arrowroot.

"5 *o'clock P. M.* Pulse eighty. Apparently better. Continue treatment of morning.

"*Saturday*, 12 *o'clock M.* Pulse eighty; some petechia about the chest; eyes injected; some nausea; no alvine evacuations. Has taken three grains of calomel and two of quinia four times. ℞. Calomel, five grains, every two hours. Blister over region of liver.

"*Sunday*, 28*th*, 9 *o'clock.* Pulse eighty-eight; capillary circulation very torpid; purplish tint over face and upper extremities; very little epigastric tenderness; eyes injected. Has been vomiting a dark-colored fluid, described by the nurse as being the "*color of laudanum.*" Tongue cleaning a little. Blister did not vesicate. ℞. Renew the blister, and give five grains of quinia and three of calomel every hour for four hours.

"5 *o'clock P. M.* Pulse one hundred, and feeble; eyes still injected, and left one discharging purulent matter; capillary circulation better. ℞. Quinia, twenty grains; water, two ounces; give a teaspoonful every hour. Continue calomel, three grains every two hours. Bowels have not been moved; ordered an enema. Weak brandy punch and chicken tea. Pains in her limbs much less severe. Intellect perfectly clear, and has been during her sickness. For her eye, apply cloths wet with a solution of sulphate of zinc, two grains, and sulphate of morphia, three grains, in four ounces of water.

"*Monday morning*, 9 *o'clock.* Pulse one hundred; vomits a dark-colored fluid; bowels moved by enema yesterday; eyes injected; capillary circulation bad; catamenia have appeared. ℞. Continue quinia and diet. Blister the extremities, and administer another enema. Discontinue calomel this forenoon.

"*Monday afternoon*, 5 *o'clock.* Pulse one hundred; vomiting as before; no mental aberration. Withdraw calomel; continue diet, stimulants, and quinia.

"*Tuesday*, 30*th*, 10 *o'clock.* Pulse scarcely perceptible; carotid

beats one hundred and twenty per minute; muscular tremors; jaundiced hue continues, also the vomiting of dark fluid like coffee-grounds; intellect still clear. Continue stimulants and quinia.

"Strong convulsions came on about 3 P. M., and at 4 P. M. the patient expired. *Post-mortem*, sixteen hours after death."

The following is a correct narrative of the evidences revealed, as taken down at the time by Dr. Remington:—

Post-mortem examination of Mary Gibson, made by Dr. Riley, 8th Mo. 31, 1853, 8 A. M., in the presence of Drs. Jewell, Bird, and Remington, sixteen hours after death.

External aspect uniformly yellow; no emaciation; vibices on the inferior extremities, with general purple suffusion principally on the inferior surface of the trunk and extremities; conjunctiva yellow, and that of the left eye remaining ecchymosed or injected with blood. On opening the cavity of the abdomen, found the adipose matter somewhat abundant and deeply tinged with bile; muscular fibre of a deep red color. The stomach containing about four ounces of black vomit, its villi enlarged and corrugated; the mucous surface stained by its contents, and covered with red points, especially at its cardiac extremity, with patches of redness interspersed throughout.

The liver was rather firm in texture, and in color closely resembling yellow *ochre;* gall-bladder distended with inspissated, dark green bile. The duodenum containing bilious secretions, with spots of inflammation diffused over its surface; the jejunum was a deep red, with softening and destruction of its mucous surface. The contents of the ileum, cæcum, colon, and rectum consisted of dark grumous blood, entirely devoid of fecal odor, which smell, by repeated, close, and accurate examinations made by all present, could not be detected in any part of the intestinal canal or its contents.

The cavities of the heart nearly empty, without coagula; and, like the aorta, containing a small amount of dark fluid blood.

The brain and its investing membranes healthy in appearance, though slightly softened.

The last case on record, is that of Edward Stricker, aged eighteen, a native of Germany, a seaman on board the brig Stæts Von Brock, lying at a wharf first above Mead Alley, and below Almond Street. He came to the Pennsylvania Hospital on Wed-

nesday, the 31st of August, and died on Saturday, the 3d of September. This was a well-marked case of yellow fever, fully confirmed by the *post-mortem.**

On board the above vessel, the captain (Brœdhering) died on the 4th inst., after an illness of four days. His physician, Dr. Blom, informed us that he died from bilious fever. Three of the crew are now sick with similar symptoms. This vessel arrived from Leghorn on the 13th of August, and has been up to this time at Mead Alley wharf.

It may not be unpardonable to name the fact, that there is at present a vessel riding quarantine at our Lazaretto from New Orleans.

The Caledonia Brander, Rowland, Master, left New Orleans, August 7, with a crew of eighteen men and eleven passengers; all well. On the first day out, a seaman, Charles Tyrrell, was taken sick with yellow fever, and died on the 9th, forty-eight hours ill. On the 8th, two more of the crew sickened, and returned to duty on the 23d; fifteen days ill. On the 10th, the second mate was attacked with chills and fever. On the 11th, another of the crew was taken sick with chill and headache, but returned to duty in two days. On the 13th, A. Witmore, seaman, took ill with yellow fever, and died on the 17th, ninety-six hours. On the 19th, the carpenter sickened with Chagres fever. On the 26th, William Green was taken ill with yellow fever, and on the 31st was received into the hospital at the Lazaretto, where he died on the 1st instant.

As this last case was undoubtedly one of yellow fever, contracted on board a vessel direct from New Orleans, where the disease has raged with almost unprecedented violence, it will be interesting to present the following account, politely sent us by Dr. T. J. P. Stokes, the Lazaretto physician, together with the *post-mortem* examination, for the purpose of showing its pathological resemblance to those cases of fever which have occurred in Philadelphia.

* As a minute account of the pathology and treatment, together with the morbid appearances exhibited after death, of all the cases that were treated in the Pennsylvania Hospital is in course of preparation, and will be published, we deem it unnecessary to enlarge.

Case of William Green.

"William Green, American, aged about forty, a printer, had worked in the *Delta* office, New Orleans, all summer; left New Orleans on the 7th of August. Was visited on board the ship Caledonia Brander, August 31, 9 A. M. His skin was of a deep yellow; eyes injected, of a deep yellow, no redness of eyes; pulse 90; weakness moderate; sat up in bed and answered questions coherently; has had no vomiting for sixteen hours; tongue reddish-brown, with white edges; mouth moist, and skin slightly warmer than natural; bowels free, has had two passages this morning.

"11 A. M. Brought into hospital. In the boat, on the way to the hospital, had a slight convulsion, and another a few minutes after he was placed in bed. Pulse feeble and small, 86.

"12 M. Found him pulseless, without sense or motion, and died at 1 P. M., without convulsion or struggle.

"The captain gave the following account of his case: "He was taken on the 26th of August, with chill, headache, and fever; had no vomiting until second day, then vomited a grayish fluid mixed with blood; the next day, 29th of August, vomited black matter; did not vomit afterwards. The yellowness came on the third day of his sickness."

"*Autopsy*, five hours after death.

"*Externally.*—Skin a deep yellow; deep yellow stripes, mottled with purple, down the back; lower extremities less yellow than trunk, arms, and head; much emaciated.

"*Head.*—Not examined.

"*Chest.*—Lungs natural; heart natural in size and appearance.

"*Stomach.*—Contained a pint of fluid, blackish-gray, with green tinge; after standing twelve hours in a glass, had a pale reddish appearance on its edges; patches of thickened mucous membrane, thinly filmed with bright red blood; mucous membrane ridged longitudinally, the ridges from an inch to two inches apart, and elevated from one-eighth to one-fourth of an inch above the surface; the surface of the mucous membrane stained with the black liquid, which I found it difficult to wash off with warm water and soap; the stomach was (except the above) of the natural size and consistence.

"*Liver.*—Pale yellow color in its *right* lobe; natural in *left* lobe, except yellow patches in its substance of half an inch in diameter.

"*Gall-Bladder.*—Filled with the blackish secretion similar to that found in the stomach.

"*Spleen.*—Perfectly natural.

"*Duodenum.*—Yellow externally; mouth full of the blackish-green secretion; the mucous membrane corrugated and ridged, patches of apparently inflamed mucous membrane.

"*Small Intestines and Mesentery.*—Bloodvessels of mesentery injected with dark red blood, and deeply tinged with yellow; small intestines contained a small portion of blackish fluid in their whole length, and were externally of a yellow and violet color; mucous membrane slightly ridged; glands of Peyer natural.

"*Large Intestine.*—Contained some of the blackish liquid; more fluid and watery, and less deeply-colored yellow tinge; in other respects natural.

"*Pancreas.*—Enlarged, and injected with blood.

"*Kidneys.*—Natural.

"*Bladder.*—Smaller than usual; contained a tablespoonful of dark yellow urine.

"LAZARETTO, September 1, 1853."

We have but little information to record of a precise character, as regards the treatment in the above cases. It has not been so much our object to furnish remarks on the therapeutics of the disease, as to present a detailed account of its outbreak, and exhibit as nearly as possible its local origin and spread.

In the first stage of the fever, the treatment in general has been by bloodletting from the arm and by cups to the back and abdomen, emetics, mercurial purges, diaphoretics, &c. During the second stage, or as soon as a remission took place, which was generally about the third or fourth day from the attack, calomel as a sialogogue was administered in some cases; in others quinia, in three or five-grain doses, every one or two hours. In the event of no speedy reaction, brandy or wine internally, and local stimulating applications by blisters and rubefacients were resorted to.

Quinia in full doses, on the first intimation of a remission from fever, appears to have been a favorite remedy. In some cases, over seventy grains were administered daily for several days, and,

as far as we could learn, without any annoyance to the brain or other organ, but with advantage. It will be remembered, however, that the cases at the Blockley Almshouse Hospital were treated without quinia in any stage of the disease. Calomel, pushed to salivation, was the principal remedy employed.

We have already alluded to the fact, that there have been other cases of disease assuming a malignant type of fever in our city since the 19th of July, in the immediate vicinity of the infected district, which we were not able to secure.

Again, there were others that resembled, in many of their features, the cases recorded as yellow fever. These, however, we have designedly omitted, because they could not be strictly identified, although it is not altogether improbable, if yellow fever had existed as an epidemic, they would have been reported as genuine cases.

Among the latter, and we allude to them particularly, because they may be noticed elsewhere, were those of Samuel Morrison, No. 76 Penn Street, below South; Joseph Roberts, one of the inspectors of vessels for the Board of Health; J. R. Davis, No. 3 Benton Street (West Market Street); Mrs. Horner, Second and South Streets; Catherine Dougherty, No. 85 Penn Street; a servant girl at No. 24 Union Street; —— Jones, in Water Street, above Almond Street; Christopher Ruff, Front Street, below Mead Alley.

The certificates in these instances read, remittent, bilious, and typhus fevers. Nor were the physicians in either of these cases willing to pronounce them yellow fever.

The case of S. Morrison, which we had an opportunity of inspecting, was an aggravated attack of bilious remittent, under which he sunk at the expiration of ten days, although he died in the same room where the Carrigan family perished about two weeks subsequently.

Joseph Roberts may have died of fever of a malignant type, but there were circumstances in his case which would lead to a different conclusion. His physician, Dr. C. W. Hornor, was not prepared to confirm the general impression that it was yellow fever.

Mrs. Horner died of bilious fever, after six days' illness. According to the evidence of one of her physicians, Dr. J. Wilson

Moore, there was a hemorrhagic tendency in her case, and she became quite yellow before death.

The case of Davis was peculiar. Dr. Gilbert, in writing to us, says of it: "I had a case of malignant fever in my own practice, which presented striking features of yellow fever; but, on *post-mortem* examination, proved to be malignant bilious, complicated with inflammation of the bowels."

This patient sickened on Monday evening, the 15th of July, and died on the following Thursday morning, in about sixty hours.

The other cases referred to, presented nothing remarkable, and were reported as bilious and as typhus fevers.

It would have added very much to the interest of this document if we could have secured the entire list of cases of fever that have occurred since the irruption of the disease on the 19th of July, in the immediate vicinity of the infected district. Some few have undoubtedly escaped our notice; owing, in a great measure, to the fact, that the Board of Health has not required the physicians, by any special resolution, to report their cases of malignant or yellow fever. A law of the legislature, however, makes it binding on physicians to do so. The Board of Health, no doubt, judged wisely in the matter, inasmuch as the fever has not appeared in an epidemic form throughout our city. By this decision, and the hesitation on the part of many practitioners to make their cases known, we never can arrive at a complete account of all of them, with their date and locality.

Enough certainly has been accumulated to establish the premises, that yellow fever has existed in our city since July 19, confining its ravages to a particular locality, bordering on the wharves and docks of the Delaware, which were a favorite resort for the malignant fevers that prevailed at similar seasons in Philadelphia, near the close of the last and at the beginning of the present century.

DIAGRAM

of the infected District and the location of the Cases of

YELLOW FEVER

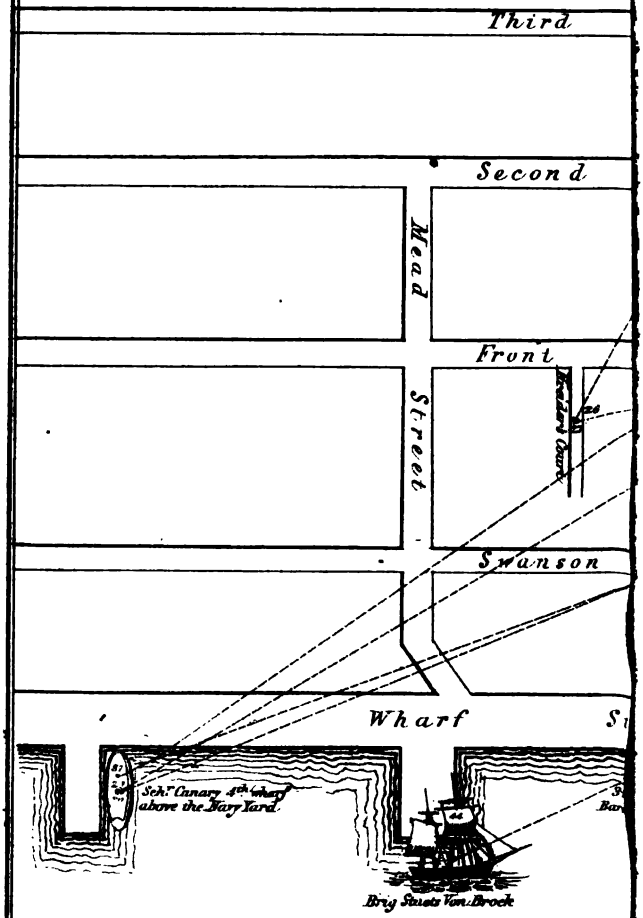
with the order in which they occurred

from July 19th to August 31st

PHILAD.A

1853.

W. J.



D e

Table of Yellow Fever Cases in Philadelphia, from July 19 to August 31, 1858, in the numerical order, &c. &c., in which they occurred.

No.	Name.	Age.	Sex.	Nativity.	Where contracted.	Date of attack.	Where attended.	By whom.	Days sick.	Black vomit.	Died.	Recovered.
1	Joseph Sharp	18	M.	U. States	South Street wharf	July 19	Corner Almond and Penn	Dr. E. S. Rickards	7		July 26	
2	George Robinson	50	M.	England	Wharf between South and Lombard	" 20	Champion House	" W. Klapp	3	Black vomit	" 23	
3	Thomas D. Koehler	19	M.	U. States	South Street wharf	" 20	" "	" "	7	"	" 27	
4	G. W. Kerkeslager	40	M.	Germany	"	" 20	Red Bank Ferry House	" Jos. Klapp	5	"	" 25	
5	Mrs. Kerkeslager	38	F.	"	"	" 20	" "	" "	6		" 26	
6	Charles Burrows	26	M.	U. States	Wharf between South and Lombard	" 20	Pennsylvania Hospital	" W. Gerhard	5	"	" 22	
7	Frederick H. Kellog	26	M.	"	Barque Mandarin	" 21	" "	" "	3	"*	" 23	
8	Fanny Martin	22	F.	Ireland	South Street wharf	" 21	Champion House	" W. Klapp	5	"	" 26	
9	J. M. G. Koehler	17	M.	U. States	"	" 21	" "	" "				Recovered.
10	Pauline Koehler	9	F.	"	"	" 21	" "	" "				"
11	Honora Stanton	35	F.	Ireland	Little Water Street	" 22	12 Little Water Street	" J. Gegan	5	"	" 27	
12	Silas Green	40	M.	U. States	Almond Street wharf	" 23	21 " "	" S. Stewart				"
13	R. N. Campbell	35	M.	"	Barque Mandarin	" 23	Clement's Hotel	" W. Klapp				"
14	John Shellcott	23	M.	England	Wharf between South and Lombard	" 25	Pennsylvania Hospital	" W. Gerhard	5	"	" 30	
15	John White	22	M.	"	" " "	" 25	" "	" "				"
16	Rosanna McKean	24	F.	Ireland	South and Water Streets	" 25	172 South Second Street	" W. H. Hooper	5	"	" 30	
17	David Murray	48	M.	England	Wharf between Almond and South	" 26	Pennsylvania Hospital	" W. Gerhard				"
18	James Markley	20	M.	"	Wharf between South and Lombard	" 27	" "	" "				"
19	James Clements	42	M.	U. States	" "	" 29	Prime Street	" W. Klapp	2		Aug. 1	
20	John Haslett	19	M.	Ireland	Doubtful	" 29	Eleventh and Christian	" W. Keating	3	"	" 2	
21	Mrs. Mullen	35	F.	"	4 Swanson Street	" 29	4 Swanson Street	" J. Gegan	6	"	" 5	
22	Mary Bulger	25	F.	"	12 Swanson Street	" 30	12 Swanson Street	" "	4	"	" 3	
23	Ann Jane Stewart	31	F.	U. States	Swanson and South Streets	" 30	South Tenth Street	" S. Jackson	14		" 13	
24	Mary Williams	22	F.	Ireland	12 Swanson Street	Aug. 6	St. Joseph's Hospital	" F. G. Smith	6	"	" 12	
25	John S. Williams	20	M.	U. States	Almond St. Wharf	" 9	36 Almond Street	" J. V. Harriott	3	"	" 12	
26	Betsey Stephens	18	F.	Ireland	Front Street below Almond	" 9	Krider's Court	" J. Heritage	4	"	" 13	
27	Ellen Boland	22	F.	"	" "	" 10	St. Joseph's Hospital	" F. G. Smith	5	"	" 15	
28	James Riley	34	M.	"	Unknown	" 13	25 Union Street	" J. Gegan	2	"	" 15	
29	Oliver Pitcher	23	M.	U. States	Doubtful	" 15	Pennsylvania Hospital	" W. Gerhard	3	"	" 18	
30	James Genton	19	M.	"	"	" 15	" "	" "	12		" 27	
31	Thomas E. Crowell	38	M.	"	South and Front Streets	" 16	Front Street below South	" J. Gegan	3	"	" 19	
32	Mary Carrigan	71	F.	Ireland	76 Penn Street	" 17	76 Penn Street	" J. Huckel	2		" 19	
33	Mary Carrigan (D.)	18	F.	"	"	" 17	" "	" "	3		" 20	
34	John Reehil	20	M.	"	Wharf below Lombard Street	" 17	Blockley Hospital	" J. Stewart		"		"
35	Ellen Parr	20	F.	"	Unknown	" 18	13 Gray's Alley	" W. H. Hooper		"†		"
36	Mary Turner	35	F.	"	82 Lombard Street	" 18	Loxley's Court	" "	2	"	" 20	
37	John Brennock	24	M.	U. States	Doubtful	" 18	Pennsylvania Hospital	" W. Gerhard	1	"	" 19	
38	Edward Carrigan	26	M.	Ireland	76 Penn Street	" 19	76 Penn Street	" W. Sharp	3		" 22	
39	Catharine Handson	40	F.	"	Unknown	" 1	Blockley Hospital	" J. Stewart		"	" 2	
40	Mary Fortner	22	F.	"	Front Street below South	" 14	" "	" "	7	"	" 21	
41	Bridget Tibley	33	F.	"	221 Front Street	" 14	St. Joseph's Hospital	" F. G. Smith	8	"	" 22	
42	Joel Sauter	36	M.	Germany	Shippen and Front Streets	" 20	Pennsylvania Hospital	" W. Gerhard				"
43	Mary Gibson	22	F.	Ireland	Penn and Lombard Streets	" 24	City Hospital	" J. F. Bird	6	"	" 30	
44	Edward Stricker	18	M.	Germany	Wharf below Almond Street	" 31	Pennsylvania Hospital	" W. Gerhard	3		Sept. 3	

* In stomach after death. † Doubtful.

In a conversation which took place among the Fellows present, in reference to the communication of Dr. Jewell, the fact of a fatty degeneration of the liver having been detected in those who had died of yellow fever, was referred to by Dr. La Roche; and the fact was confirmed by Drs. T. H. Bache and Keating, as far as regards the *post-mortem* examinations made at the Pennsylvania and St. Joseph's Hospitals. In all the cases, the cells of the liver were found to be filled with an oily substance.

Dr. NEILL presented a number of sections of human heads to illustrate a condition of the pharyngeal orifice of the Eustachian tube, not noticed in the standard works on anatomy. By a reference to the specimens, it will be found, Dr. Neill remarked, that from the posterior and superior border of the pharyngeal orifice of the Eustachian tube, there proceeds a growth of one or more thickened folds of mucous membrane, thickly studded with mucous glands, overhanging and occluding the orifice of the tube. In one or two of the specimens, the structure presents a striking resemblance to the tonsils, having the same wide-mouthed mucous follicles which are characteristic of those bodies. These specimens were not selected with the view of exhibiting this peculiarity of structure; they were prepared for general anatomical purposes. Whether the condition they present of the Eustachian orifice be considered as one entirely normal, or as an exaggeration of the normal structure approaching the pathological, it is in either case one of much importance. Its presence affords a more rational explanation of the deafness so frequently attendant upon enlargement of the tonsils, especially in children, than that which refers the deafness in such cases to the enlarged tonsil encroaching upon the inner orifice of the tube in such a manner as to close it. In fact, the distance between the tonsil and the Eustachian orifice is so considerable that some, among whom may be mentioned Mr. Wilde, in his recent *Treatise on Aural Surgery*, have doubted whether enlarged tonsils are ever the cause of deafness.

When the tonsils are the seat of disease, we can easily suppose that a structure—so nearly resembling them in its anatomical characters—found at the pharyngeal orifice of the Eustachian tube, may also, under the same circumstances, become

affected in a similar manner, and thus completely close the tube. There is no difficulty, likewise, in supposing that hypertrophy of the structure referred to may occur independently of enlargement of the tonsils, and that, in such a case, the introduction of a catheter, in the ordinary manner, to determine the permeability of the tube, would be rendered very difficult, if not impossible.

The usual mode, also, of testing the permeability of the tube, by closing the mouth and nostril and making forcible expiration, must fail when such a condition of the orifice exists, even though the upper portion of the tube should be entirely free. Forcible expiration would, in fact, force the hypertrophied structure more firmly into the orifice, as a cork into the mouth of a bottle.

A proposition (44) for Fellowship was presented.

Stated Meeting, October 6, 1853.

Dr. WOOD, President, in the chair.

Present, forty-eight members.

The Librarian announced the receipt of the second volume of Romberg on Diseases of the Nervous System, from the Sydenham Society of London.

A communication was received from Dr. FLEETWOOD CHURCHILL, of Dublin, acknowledging his election as an Associate of the College.

Propositions 43 and 44 were balloted for, and the individuals therein named elected.

FRACTURE OF THE PATELLA.

Dr. NEILL stated that he had recently treated two cases of fracture of the patella, according to a plan which he believed to be novel.

The great difficulty experienced in the treatment of this fracture is in the coaptation of the fractured surfaces and the maintaining them permanently in contact, in consequence of the contraction of the rectus and other muscles drawing up the superior fragment.

By the ordinary mode of treatment, in consequence of the pressure necessary to keep the upper fragment in place, considerable inconvenience is often experienced by the patient, and occasionally irritation of the skin over which the bandages pass.

In one case which fell under the care of Dr. Neill, the fracture was accompanied with considerable injury of the soft parts about the knee. After the swelling, etc. consequent upon the injury was sufficiently reduced by the usual means, the fractured portions of the patella were brought in contact, and retained so, by passing a strip of adhesive plaster above the upper fragment, and bringing its two ends down below the knee, and another strip in the opposite direction, and thus repeating the strips until a sufficient force was acquired to keep the two fragments in contact. The strips applied as above were retained *in situ* by a few transverse strips applied above and below the knee. These latter strips compress also the muscles, and counteract their tendency to act upon the upper fragment. The more effectually to accomplish this end, the upper strips were made somewhat broader than the others. The leg was then enveloped in a roller, a splint applied beneath the limb, and this properly elevated.

This plan of treatment Dr. Neill considers to be one which, while it is sufficient to maintain the coaptation of the fragments until complete reunion is effected, is more comfortable to the patient, and more easily applied; and, at the same time, is unattended with the inconvenience experienced in the readjustment of the usual dressings; it being only necessary in case of any retraction of the upper fragment to apply new strips above and below the patella without disturbing those already on. In the case alluded to, a perfect reunion of the fracture was obtained, an evident ridge being formed at the line of union of the two fractured surfaces.

A second case was treated in the same manner. This, however, has only been under care two weeks. The comfortable condition of the patient, and the general condition of the fracture, encou-

rages the hope that the result will be equally satisfactory as in the first case.

Dr. CHAS. D. MEIGS stated that, some time since, in a fracture of the patella occurring in a well-known citizen of Philadelphia, Dr. John Rhea Barton had followed the same plan as that detailed by Dr. Neill, with complete success. This case had not been published.

YELLOW FEVER.

Dr. J. WILSON MOORE remarked that his location had given him an opportunity of witnessing several of the cases of fever prevailing in the infected district. For a few days past he had not seen or heard of any new case, and he believed the disease was now rapidly declining.

The fever had unquestionably been a very malignant one; he considered it genuine yellow fever. It was confined mostly to the locality included between Lombard and Almond Streets on the north and south, the River Delaware on the east, and Front Street on the west. Some of the cases which fell under the notice of Dr. Moore were attended with but slight reaction, marked with great prostration, pains in the back and limbs, injection of the eyes, irritability of the stomach, and tenderness at the epigastrium. In other cases, reaction was more decided, and of a more inflammatory character; pulse 110, with some tension. The cases attended with slight reaction and prostration were treated with stomachics, morphia, diaphoretics, aided by external warmth, turpentine, ammonia, and, when occasion required, mild cathartics. Those in which the reaction was decided, and the general aspect inflammatory, were treated by venesection, cups or leeches to the head and epigastrium, laxatives, diaphoretics, and the antiphlogistic remedies generally. The success of the treatment has not, however, been marked; the milder cases mostly yielded to venesection or sweats, with mild diaphoretics and cathartics; the more violent generally sank under any mode of treatment that was instituted.

One case, the doctor remarked, was to him particularly interesting.

A gentleman of full habit, strong and athletic, was attacked by a slight chill, which was treated by his wife with frictions of warm whiskey to the extremities, external warmth, and other simple remedies. Dr. Moore saw him five hours subsequent to the attack. Fever had then set in, with pain of the head, back, and limbs, and some tenderness of the epigastrium; pulse about 110, with but little tension. Dr. M. immediately tied up the patient's arm, and drew off about twenty ounces of blood, and directed calomel and Dover's powder, half a drachm of the first, and one scruple of the latter, divided into four powders, which the patient was to take during the night, drinking at the same time warm snakeroot-tea; and to have warm bricks applied to his feet, and to be covered with blankets. A profuse perspiration was thus induced. In the morning, the Dr. found his patient with diminished fever; but still complaining of some pain in the head. He was now cupped upon the temples, and this was followed by leeches, and a blister to the epigastrium. In the course of the day his fever remitted, and his pulse sank to 86. On the third day, the pain in his head ceased; and the surface of the body exhibited a tendency to coolness; turpentine julep and wine-whey were then administered. He now appeared to convalesce, and continued to mend until the latter part of the fifth day, when an unexpected change took place; he sank rapidly, and died about 4 o'clock P. M. the succeeding day.

The remedies all acted satisfactorily, producing the effect expected. With one exception, the odor attendant on the administration of turpentine was not perceptible in this, or any other case where it was given.

The blood drawn coagulated readily, but exhibited no buffy coat; the clot was soft, allowing a pin to be passed through it with great ease, and in every direction. The patient exhibited a slight yellowness of the skin.

Upon an examination of the body after death, the only morbid appearances detected were in the stomach. This viscus contained about half a pint of black vomit. There was a general injection of the vessels of the stomach, and especially about the cardiac portion, giving the appearance as though this part was surrounded by a dark ring. When the liver was cut into, blood followed the

incisions, and, on cutting into the kidney, no smell of turpentine was discoverable.

Dr. Moore was pleased with the result of the sweating practice in the cases which fell under his notice.

In one case, in consultation with Dr. Gegan, quinine was administered without any good result. The fever had intermitted, and convalescence appeared to have set in; but, in a few hours after the quinine was given, hemorrhage from the tongue, gums, bowels, etc. took place, and it was only by the assiduous administration of turpentine, ammonia, wine-whey, nourishment and other appliances, that the patient was saved.

From the use of turpentine in the latter stages of the attack, Dr. Moore has seen the best results; he considered it, with yeast and diffusible stimulants, as important in the stage of apyrexia, as bleeding in the early stage of the decidedly inflammatory cases.

Dr. Moore referred to two cases attended with black vomit, dark-colored discharges from the bowels, hemorrhages from the gums, etc., and the utmost prostration, which were seen by him in consultation on the seventh and ninth days after the attack. Under the use of turpentine, ammonia, and other stimulants, the patients are now so far recovered as to sit up, though one is still very feeble, and with bed-sores upon her back.

Dr. T. H. BACHE stated that the number of cases of yellow fever admitted into the Pennsylvania Hospital had been *twenty-three*; of these, *fourteen* had died, *seven* recovered, and *two* still remain. These cases were placed in the common wards, without any attempt to separate them from, or to prevent intercourse between them and the other patients, but in no instance had the disease been communicated to the latter.

Several Fellows of the College having expressed a desire to hear some account of the cases of yellow fever that had occurred in the south-eastern portion of the city, and district of Southwark—

Dr. STOCKER stated that he had attended several cases of the disease. In every case occurring in his practice, the patient had evidently contracted the disease in the locality which had been

denominated the infected district. Nine cases of the disease had been treated by him, five of which had proved fatal.

Case I. was that of Richard B. H——e, æt. 7 years, born in Philadelphia, and residing with his parents at No. 22 Swanson Street. Was taken sick about 11 A. M. of Monday, August 29; complained of excessive pain in the head, lassitude, and considerable drowsiness. Lay down and slept several hours; woke up feeling somewhat more comfortable; but in the evening was feverish, complained of excessive thirst, and manifested great disposition to sleep.

On the following day his fever continued high, with great thirst and drowsiness. At 7 P. M. his mother gave him a dose of calomel and rhubarb. During the night he had extreme thirst, great nausea, restlessness, dry hot skin, and disposition to sleep.

On the following day his symptoms continued as before; his bowels had been opened twice; but his restlessness and drowsiness had increased so much, that his parents summoned me to visit him for the first time on Wednesday, August 31, at 9 P. M. The patient, upon being roused, complains of pains in the head, back, and legs; skin hot and dry, but no yellowness; pulse about 110; tongue moist, with paste-like centre, red at tip and edges; excessive thirst; no nausea, nor tenderness at epigastrium. Eye injected, with considerable suffusion of face.

Ordered calomel and rhubarb, each five grains, immediately; to be followed in two hours by a dose of the following, repeated at intervals:—

℞. Succi limonis recent. f℥iv.
Potassæ carbonatis, q. s. ad saturan.
Sp. æth. nitrici, f℥j. M. S. f℥ij. quaque secunda hora.

Thursday, September 1. Patient has been extremely restless all night, with some delirium; more disposition to coma; tongue as before; has had two evacuations, but their color was not noticed by attendants. Ordered calomel, gr. ss., every two hours. The patient was visited several times during the day; in the afternoon the eyes became so fiery red, and the somnolency so much increased, that twelve leeches were ordered to temples and forehead, with injunction not to allow more than f℥iv. of blood to be lost.

Patient has had several dejections of dark color and tar-like consistence.

2*d*, 9 A. M. Patient became more calm after the application of leeches; had less delirium and restlessness. At time of visit is very difficult to arouse; complains of nothing but his head; no nausea; less heat of skin; pulse about 96, and more feeble. Ordered quiniæ sulph. grs. ij. every hour, unless nausea is produced.

8 P. M. Patient very drowsy, and more difficult to arouse; tongue dry and black; teeth covered with black sordes. Has continued to take quinia during the day, but immediately after visit at 5 P. M., having vomited about a gill of black matter resembling coffee-grounds, the quinia was immediately stopped, and the following prescription, which had been left in view of such an event, substituted:—

℞. Creasoti, gtt. vj.
Sac. alb. ʒj.
Mucilag. gum acac. fʒij. M. S. capiat fʒij. quaq. secunda hora.

The patient continued during the night to vomit the same kind of black matter; had frequent black stools; the coma, thirst, and restlessness increased, until death closed the scene, at 8½ A. M. of Saturday, September 4.

This case was not seen until near the close of the third day of the disease. The patient had, one week previously, fallen from a height of ten or twelve feet, directly upon his head; had complained much of pain in his head at that time, and had lain about the house for one or two days. This circumstance, although not drawn out until after death, will account for the very great tendency to coma from the onset of the disease.

It may be as well here to mention, that in this house Mr. B——m, æt. 26, brother-in-law of the above, had been taken sick during the night of Thursday, August 18, with decided chill, fol lowed by fever, and other symptoms of the disease under consideration. He had no black vomit, but purging of black matter during the latter two days of his illness. There was no abatement in the violence of his symptoms from the commencement of his disease until the fatal issue, which took place on Tuesday night, the 23d, being the conclusion of the fifth day of the disease.

He was attended by another physician, who had practised for some time in the family.

CASE II. was Mrs. Rachel R——s, æt. 17 years, born in Philadelphia (sister of Case I., and residing in the same house), of fair complexion and light hair. Was taken sick on the morning of Wednesday, August 31; had severe chill, followed by considerable fever, great thirst, and pains in head, back, and limbs. Mother administered some hot ptisan for the purpose of inducing diaphoresis, but without success. Patient was seen for first time at 9 P. M. of same day.

Complains of excessive pains in head, back, and calves of legs, with great prostration; eye injected; countenance suffused and anxious; tongue white, with bright red edges; complains of some nausea, but no tenderness of epigastrium; pulse 98, of moderate strength and fulness; heat of skin not excessive; patient feels great burning internally; bowels costive; extremities somewhat cool. Ordered Vs. f℥xij.; cold applications to head; mustard pediluvium; sinapism to epigastrium; and to take immediately—

℞. P. hydrar. chlo. mit. grs. vj.
P. rhei, grs. viij.
Ext. gentianæ, grs. iij.

To be followed in three hours by half an ounce of Epsom salts. As soon as the bowels have been moved, to give the following:—

℞. P. quiniæ sulph. ℥ij.
Acid. sulph. arom. q. s. ut ft. mas, div. in
pil. No. xx. S. capiat duo quaque hora.

Her infant, of four months, to be applied to the breast.

September 1, 9 A. M. Patient has slept but little during night; has had several copious evacuations; pain in head constant; some nausea; heat of skin less than at visit last night; eye red and injected; deafness considerable (from quinia); milk in breast very much diminished.

Ordered quinia, grs. v. every hour.

9 P. M. Patient improved; eye less injected; countenance less anxious, and expression more natural; some epigastric tenderness; tongue less red; pulse 80, more feeble; prostration very great; very little milk in breast. Continue quinia.

2d, 9 A. M. Patient much improved; headache diminished; little pain in back; but sensation of lassitude in legs; has crept into adjoining room to see her brother; tongue cleaning; bowels moved twice during last twenty-four hours, dark-colored, and stains the vessel of an orange color; some milk in breast; some appetite. Ordered quinia, two grains every three hours; beef soup.

Patient continued to improve rapidly, and attendance upon the case was discontinued after the 5th of September.

CASE III.—Alfred S——h, of fair complexion and light sandy hair, æt. 17 years, born in Philadelphia, occupation boatman, at South Street wharf, and apprenticed to William D——s (Case V.), residing at No. 3 Swanson Street; of fine muscular development; was seized on Sunday night, September 4, at 10 o'clock, with severe chill. Saw him at 12 P. M. Patient is much sunburnt; notwithstanding this, the suffusion of his face is very marked; eyes injected, and look like coals of fire; excessive pains in head, back, and legs; skin hot, dry, and tingling; pulse full, hard, and frequent; no tenderness of epigastrium; no nausea; tongue coated white, and red at tip and edges; disposition to stupor.

Ordered Vs. f ℥xij.

℞. P. hydrar. chlo. mit. grs. viij.
P. rhei, grs. x.
Ext. gentianæ, grs. iv.
Ft. pulv. sumen. stat.

and effervescing draught every two hours; with iced barley-water *ad libitum*.

5th. Patient has been very restless all night; sleeps almost continuously, but answers correctly when roused; heat of skin less marked; pulse strong, about 100; has had two dejections; complete suppression of urine; eyes very much injected; tongue less moist, deeper red. Patient calls loudly for ice and ice-water, which have been freely given. Complains more of his head than anything else. Ordered—

℞. Calomel, gr. ss.
Nitrate of potassa, grs. ij.
P. ipecac. gr. ¼.
P. rhei, gr. jss. every hour.

To have six scarified cups to temples and nape of the neck.

5 P. M. Patient less stupid, somewhat more wakeful; less pain in the head and limbs; thirst continues unabated; some tenderness of epigastrium observable; tongue dry, parched, and red, like raw beef; pulse 86. Bowels have been moved twice since morning visit, has also passed some urine. Pills continued, and blister ordered to epigastrium.

6th, 9 A. M. Patient has been restless all night, with delirium, and is very hard to rouse, and answers less distinctly to questions put to him. General symptoms but little altered. Blister has drawn in one or two small places, it having been difficult to retain it *in situ*, owing to extreme jactitation; some epistaxis; bowels moved several times during the night; heat of skin less; tongue red at edges, dark at centre and base.

Ordered quiniæ sulph. grs. v. every hour.

9 P. M. The hemorrhage from nose has been frequent during the day, but not constant; bowels not moved since morning; no improvement in symptoms; but, on the contrary, the stupor increases. Mustard sinapism to whole length of spinal column, ordinary enema, and continue treatment as before.

7th, 9 A. M. Patient has slept less heavily during the night; answers very coherently; says he feels easier; thirst less urgent; some nausea, but no vomiting; tongue dry, and black in centre, with blood-red edges; eyes still injected; less suffusion of countenance; hemorrhage from nose continues at intervals. Quinia continued.

6 P. M. The weather up to this time had been excessively hot; the wind suddenly changed to the north; there was a very remarkable change in the temperature, and the thermometer fell rapidly. The patient had been lying near an open window asleep, and became very much chilled. At 9 P. M. his extremities were cool, heat of skin almost entirely gone; he was in a state of stupor, and could be roused with the utmost difficulty; pulse feeble, and compressible; teeth covered with dark sordes; hemorrhage from the nose more persistent, although small in quantity; some slight hemorrhage from gums; tongue dry, and protruded with difficulty. Brandy and water ordered to be given freely; hot applications to the extremities; sinapisms to the spine

and portions of the limbs in rapid succession. Essence of beef ordered in small quantities, frequently repeated.

8*th*, 9 A. M. Patient has been delirious all night; talks incoherently; has had several black and bloody stools during the night; surface of the body and extremities warm and comfortable; pulse feeble; tongue dry, black, and bleeding when protruded; hemorrhage from nose and gums continues at intervals; less jactitation. About an hour since vomited some fresh blood.

Mixture of creasote, as directed in Case I., was ordered, but in larger dose; five grains of carbonate of ammonia were given every two hours, and brandy at equal intervals between.

Profuse vomiting and purging of black matter like coffee-grounds continued during the day, until, as his friends expressed it, he had lost buckets full. Death ensued at 6 P. M. The body continued warm for many hours; and, although but little yellowness of skin had been observable during life, a dark yellowish tint was very marked in about twelve hours after death.

This patient, I have subsequently learned, went repeatedly in his row-boat from the wharf to the vessel called the Mandarin.

CASE IV.—Mary, wife of Henry T——s, æt. 28 years, born in France, residence No. 8 Lombard Street, west of Front, according to the history of her case, as detailed to me by her husband, was seized on Monday, September 5, with severe chill, followed by fever, nausea, vomiting, and the usual symptoms of the disease. The patient was attended by Dr. F—— until Monday morning, September 12, when her husband believing that her disease was not understood by him, dismissed Dr. F——, and requested my attention to the case. The patient was first seen by me at 5 P. M. of the 12th, when she presented the following hopeless condition: Patient lies motionless on her back; skin cool, and of a pale lemon color; extremities cold; marked tenderness of epigastrium; tongue red at tip and edges, with brown dry centre; sordes on the teeth; eyes lustreless, conjunctivæ injected; pulse about 80, feeble, and very compressible; difficult to arouse; intellect dull; complains of head; suppression of urine; discharges stools in bed, which are black and watery. About one hour before visit, patient had vomited about one teaspoonful of blood. Brandy

ordered to be freely given, with grs. v. of carbonate of ammonia in emulsion every two hours, if the stomach will tolerate it.

Black vomit ensued in considerable quantities during the night and succeeding morning. Patient died at 11 A. M. of the 13th, being the ninth day of the disease.

Case V.—William D——s, æt. 35 years, born in the United States, boatman by occupation (at South Street wharf), of dark complexion and black hair, residence No. 3 Swanson Street until after the death of his apprentice (Case II.); was taken sick at the residence of his mother, No 48 Penn Street, whither he had removed, on Sunday morning, September 11. Patient went to meeting in the morning, where he experienced a severe chill, excessive pains in the head, back, and legs, with such prostration that it was with difficulty he was enabled to reach his mother's house, although but two squares distant, and from which he had walked with ease but an hour and a half before.

Patient was placed in bed, several domestic remedies were used to induce perspiration and moderate his excessive thirst. His symptoms increased hourly, and on Monday, the 12th of September, at 9 A. M., I was summoned to attend him, when he presented the following appearances: Of muscular frame; face, arms, and neck much sunburnt; suffusion of eyes very marked; complains of pains in the head, back, and legs below the knees; thirst excessive; heat of skin considerable; pulse full, hard, and more frequent than ordinary; tongue moist, with white paste-like centre, and pale red edges; spirits much depressed; no tenderness of epigastrium; no nausea nor vomiting.

Ordered Vs. f℥xij.; emetic of ipecac., with copious draughts of warm water; cold applications to the head. As soon as his stomach becomes quiet, P. hydrar. chlo. mit., and P. rhei, āā grs. x.

4 P. M. Emetic operated well; bowels have been opened twice. Ordered grs. x. of sulphate of quinia every hour; iced barley-water, and ice, swallowed in small pieces, *ad libitum*.

13*th*. Patient slept uneasily during the night; some delirium; talked about his business affairs; no perspiration; calls ceaselessly for ice-water; complains that his eyes feel as though they would burn up; some deafness from quinia; no nausea; no tenderness

of epigastrium, but sense of fulness there; skin hot, dry, and harsh, but not yellow; tongue but little altered from yesterday; if anything, of somewhat brighter red.

Ordered grs. v. of quinia, combined with gr. ss. of calomel, every hour; and f3ij. of liq. ammoniæ acetatis every two hours.

14*th*. Patient very restless; somewhat drowsy; thirst excessive; some tenderness of epigastrium; suppression of urine; bowels costive; complains most of pains in the head and legs. Other symptoms but little changed.

Ordered warm fomentations over the abdomen; enema of Glauber's salts and water; quinia, grs. ij., calomel gr. ½, every two hours.

15*th*. Condition of patient not improved. Heat of skin considerably less; extremities somewhat cool; drowsy, but intellect perfect when roused; tongue cleaner, less red; gums tender, mercurial effect decided; pulse 90; epigastrium tender; thirst undiminished.

Ordered warm bricks to extremities, hot fomentations to abdomen, and sinapisms to different parts of the body and extremities in constant succession. Calomel suspended. Ordered quinia, grs. ij. every two hours; also potassæ chloratis, grs. v. in solution, every intermediate hour.

16*th*. Patient slept more calmly during the night; less delirium; tongue cleaner; skin less dry, with some tendency to moisture; extremities warm; bowels not moved during the last twenty-four hours; lies awake longer; headache less severe; pulse more feeble; condition of tongue not altered; thirst still continues, but not so excessive; some disposition to nausea.

Chlorate of potash continued, also quinia. Ordered mixture of creasote, once in three hours; enema of Glauber's salts, in solution; mustard pediluvium; essence of beef, in small quantities.

17*th*. Patient had two evacuations of a dark color, but not of the nature of black vomit, after enema yesterday. Slept well during the night; no delirium; says he feels altogether better; no pain in the head, back, or legs, but sense of weariness; moves himself about the bed with ease, although enjoined to perfect quietude; sense of hearing better; tongue moist, clean at tip and edges, with whitish centre; expression natural; body and extremities warm; pulse feeble; less nausea and thirst; considerable

yellowness of skin, more especially about the face, neck, and chest; frequent thin and watery discharges from the bowels.

Ordered carbonate of ammonia, grs. v., every two hours; essence of beef; brandy and water; enema of decoction of flaxseed with ten drops of laudanum.

10 P. M. Patient awake at time of visit; very calm; surface of body and extremities natural; no pain; no complaints, except of unslaked thirst; has had one evacuation of dark ropy matter since morning visit; urine normal in quantity, but exceedingly yellow.

Upon questioning patient as to his feelings, says he feels "*very well*," and very comfortable, but as though he were "*going to the other world*."

Special injunctions given to keep the patient quiet. To continue the stimulus, with warmth externally, and nourishment as he can take it, in small quantities. During the night patient continued calm, gave directions as to the conduct of his business after his decease, with directions to avoid a hasty interment; took such articles of drink and medicine as were offered him, without nausea, vomiting, or purging. Fell asleep about 5 A. M. of the 18th; soon became violently delirious, and expired at 7 A. M. of the same day, being at the commencement of the eighth day of his disease.

CASE VI.—William M——n, æt. 25 years, born in Wales, with dark hair and olive complexion, was engaged in removing bed, bedding, &c. of Case II., on the 8th and 9th of September. Felt chilly, with much pain in head, on the 13th. Took some liquor, and a dose of salts; felt somewhat better. Got up and ate his usual breakfast on Wednesday, the 14th. Had business at the court-house; while there, was seized with a violent chill, pain in the head, nausea, and intense thirst. Drank freely of water on his way to his lodgings, at No. 48 Penn Street, which he reached about 1 P. M. His landlady gave him at once ten grains of calomel, and covered him with blankets.

September 14, 2½ P. M. The patient, at the time of my first visit to him, complains of pain in the head, back, and limbs; his countenance is somewhat suffused; his eyes slightly injected; epigastrium tender and tense; his tongue is white in centre, pale red on

the edges, soft, and moist; pulse 114, and so compressible as to be almost obliterated on the slightest touch; skin warm, with some disposition to perspire. His bowels have been moved several times last evening and this morning by the Epsom salts taken yesterday. He has not urinated since last night at bedtime. Intelligence perfect; sense of distension very great, as he acknowledges to have drank enormous quantities of water, and yet has not had enough.

Ordered ipecacuanha ʒj. in divided doses, until free vomiting ensues. In two hours thereafter to take quinia grs. v., and calomel gr. ss. every hour.

Thursday, 15*th*, 9 A. M. Patient vomited freely yesterday; had several copious stools of green color; slept but little during the night; no alleviation of pain in the head, back, or limbs; prostration very great; no appetite; tongue white in centre, fiery red at tip and edges; skin somewhat moist; pulse 80, still very compressible; less tenderness at epigastrium; no nausea; slight deafness; thirst continues.

Continue pills every two hours. Take grs. x. of chlorate of potash, in solution, every two hours, intermediately.

9 P. M. Patient does not feel so well as he did this morning. Pulse 90, feeble and compressible; skin warm; thirst more urgent; no nausea or vomiting; pains in the head and back somewhat relieved, but in legs undiminished; has urinated freely during the day, but has had no dejection since 1 P. M. Continue treatment. Ice internally *ad libitum;* sinapism to epigastrium; mustard pediluvium; enema of Glauber's salts in solution.

16*th*. Patient slept several hours during the night; bowels were moved freely by enema; eyes less injected; tongue paste-like, with pale edges; slight epigastric pain on pressure; no nausea; pulse 88, soft, and compressible; skin warm, dry, and harsh; gums tender, with decided mercurial fetor.

Suspended calomel. Continue quinia and chlor. of potas.

17*th*. Patient has passed a very comfortable night; is free from pain; conjunctivæ less injected, but somewhat yellow; has had two copious evacuations, the liquid part being of an orange yellow, and staining the vessel of same color; urine copious and yellow; tongue cleaning; pulse 80, less compressible; no nausea; no tenderness of epigastrium. Patient asks for something to eat.

The patient improved each succeeding day; his thirst diminished, and appetite increased rapidly; his feces and urine were for several days of the orange color described above. His muscular strength returned but slowly, and for several days he was obliged to remain in his room from inability to descend the stairway.

Attendance upon the case was discontinued after the 22d of September.

CASE VII.—Mr. Jacob Hague, æt. —— years, residing at No. 22 Swanson Street (father of Cases I., II., and VIII.), retired to bed, feeling in his usual health, on the evening of Wednesday, September 14. About 4 A. M. of the 15th, was roused from sleep, feeling excessive pain in the legs, and over the right eye and temple; some chilliness, cold extremities, and great prostration. His wife administered a sufficient quantity of ipecacuanha to provoke free vomiting, also hot mustard pediluvium. Free perspiration ensued.

September 15, 10 A. M. Patient visited for first time. Very restless; complains of pain over the right eye as excessive, pain also in the back and legs; skin hot, but moist; tongue white and paste-like in centre, red at edges; eye injected; pulse 82, regular, and of ordinary fulness; no pain at epigastrium; some nausea; bowels constipated at all times. Ordered calomel, grs. x., at once, Epsom salts in three hours afterwards; to be followed in two hours, and repeated at same interval by pill containing five grains of quinia and half a grain of calomel.

9 P. M. Headache more general; restlessness increased; spirits much depressed; thirst considerable; pains in the legs very great; skin warmer than natural; pulse 90; eye much injected; tongue as at morning visit.

Iced barley-water with lemon-juice *ad libitum*. Wash down pill with grs. x. of chlor. potas. in solution, every two hours.

16*th*. Patient more comfortable; had some perspiration during the night, none at time of first visit; skin warm; pulse 70; tongue coated with thin white film, and red edges; intellect perfect, as it has been from commencement; thirst not so troublesome; no appetite; headache not so constant; pains in the back and legs continue, but more of a weary feeling; bowels moved several times; urinates freely.

17th. Patient slept well during the night; pulse 70; tongue cleaning; eye less red; pains in the head, back, and legs very slight; thirst still continues, but not troublesome.

Suspend calomel. Continue quinia, grs. iij., with grs. iij. of Vallette's mass, once in three hours. Also chlorate of potassa.

Patient continued to improve daily; the appetite increased rapidly; the thirst diminished in the same proportion. Prostration of muscular system was the most troublesome symptom during convalescence. Quinia was suspended on the 19th, and infusion of serpentaria substituted. Attendance was discontinued after the 25th of September.

CASE VIII.—Mrs. Susan, wife of Thomas L——d, born in the United States, æt. 25 years (daughter of Case VII.), residence No. 407 South Front Street, near Catharine, was seized on the morning of Thursday, September 15, 1853, with rigor, succeeded by fever, great thirst, pains in the head, back, and legs.

Visited 15th, 10 A. M. Patient much prostrated; great depression of spirits; pains in the head and legs very distressing; no pain at epigastrium; no nausea; no suffusion of the face; eyes injected; heat of the skin moderate; pulse 104, feeble and compressible; tongue pasty white, with red edges.

Ordered ipecacuanha, *ad effec.* In one hour after vomiting has ceased, calomel grs. x., and one hour thereafter quinia grs. x., and calomel gr. ss.; to be repeated every hour until twelve doses are taken.

9 P. M. Free vomiting ensued; has had three dejections; pains in the head and legs intolerable, none in the back or epigastrium; eyes very much injected; very little suffusion of the face; pulse 120; tongue unaltered; heat of skin much greater.

Continue quinia and calomel every two hours; take also grs. v. of chlor. potas., in solution, every two hours. Barley-water and lemon-juice.

16th, 9 P. M. Patient is more cheerful; headache very distressing; skin hot and dry; eye injected; more suffusion of the countenance, giving the tipsy look so common in this disease; tongue red, like raw beef, with a streak of pasty white on right side; pulse 120, weak, and compressible; some epigastric tenderness;

no dejection since 11 P. M. yesterday; secretion of milk in breast almost entirely ceased.

Ordered to continue treatment. Give enema with Glauber's salts; hot mustard pediluvium. Cold douche to head.

9 P. M. Bowels moved by enema; skin very hot; pulse 104; tongue fiery red; eyes more injected; pains in the head and legs continue unabated; some nausea; slight drowsiness; thirst excessive.

Continue treatment. Sinapism to epigastrium at intervals; apply the suction-glass to breast.

17*th*, 9 A. M. Patient feels no better; more pain in the back, legs, and head; pulse 106, full, and harder than yesterday; eyes more injected; nausea increased; sensation of burning up inside; thirst very troublesome; had two dejections since last visit.

Ordered spice plaster to epigastrium; warm fomentations to abdomen. Suspend calomel. Apply eight leeches to anus. Continue grs. v. quinia every two hours, and chlor. of potas.

9 P. M. Patient somewhat relieved; less pain in the head and back; pulse 100, softer, and somewhat feeble; leecher applied twelve leeches instead of eight, and patient evidently feels the loss of blood; heat of skin considerably less; nausea continues.

18*th*, 9 A. M. Patient slept several hours during the night; is less restless; nausea more obstinate, occasional vomiting of clear liquid; skin inclined to coolness; tongue much less red; less injection of the eyes; headache continues; pulse 100, weak, and thread-like; urination free.

Ordered sinapisms to abdomen and extremities; injection of Glauber's salts. Discontinue quinia, and substitute gtt. xv. of oil of turpentine, in emulsion, every three hours.

9 P. M. Patient's stomach rejected turpentine as often as administered, even when in diminished quantity; physiognomy bad; skin of dough-like color and feeling, cold and clammy; extremities cold; pulse 120, very feeble and compressible. Leech-bites examined by parent, and considerable oozing of blood found to have taken place. Small dossils of lint were directed to be applied to each, and compression made.

Turpentine suspended. Brandy and water administered freely. Sinapism to whole length of spine; warmth to extremities. Suction-glass to breasts.

19*th*. Patient is very feeble; pulse 120, very weak and thread-like; nausea somewhat diminished, but vomits frequently a clear glassy fluid; less restlessness; no dejections for twenty-four hours; stomach rejects the brandy and water.

Ordered sinapisms to spine and extremities at intervals. Iced champagne *ad libitum*. One tablespoonful of mixture of creasote (gtt. iv. to f℥iv.) to be taken every two hours.

9 P. M. Nausea very distressing; does not vomit, however, so frequently; pulse very feeble; countenance dusky-looking; champagne stays better on stomach.

Ordered blister to epigastrium. Alternate creasote mixture with a mixture of chloroform, of which give one teaspoonful, containing one drop, at a dose.

20*th*, 9 A. M. Patient slept none during the night; nausea and vomiting much diminished; tongue less fiery red; complains much of inward heat; has not felt the blister; it has drawn, however, in a few places; skin cool; warmth of extremities has been maintained by hot bricks; less restlessness.

Ordered to take one teaspoonful of Epsom salts largely diluted. Suspend creasote mixture, and continue chloroform mixture; iced champagne, brandy and water; quinia grs. ij. every two hours, if stomach will tolerate it.

9 P. M. Patient is more comfortable; stomach did not reject salts; has had two dejections, excessively dark, floating in yellow fluid; urine abundant; nausea continues at intervals.

21*st*, 9 A. M. Patient slept several hours during the night; pulse 96, feeble, but not so compressible; patient has taken largely of stimuli; dislikes champagne; skin cool; nausea less persistent, has vomited but twice since visit last evening; bowels opened spontaneously, discharge of black matter, in thick liquid of yellowish color. Patient suggests that she could eat something. Two fluidrachms of milk removed from breasts.

Continue quinia; brandy and water; oyster liquor, scalded, one tablespoonful every two hours.

9 P. M. Patient more comfortable; vomiting has ceased, nausea very slight at intervals; enjoys soup; complains of her blister; pulse stronger, 90; skin of more uniform temperature; expression of eyes more natural; tongue cleaning, and of more natural appearance.

From this day the symptoms of the patient rapidly improved. The injection of the eyes rapidly disappeared, the tongue wore a filmy white aspect for some time, but lost all its fiery redness in a day or two. The appetite increased rapidly, and it was with some difficulty kept within the bounds of safety. Stimuli were withdrawn gradually, as the stomach became tolerant of food, so that they were entirely suspended after the 24th. The bowels were moved twice per diem for several days, afterwards but once. The patient's strength returned slowly, but she was able to take a short walk on the 1st of October. The secretion of milk increased rapidly, so that by the 5th of October there was an abundance for her infant of five months old. Attendance was discontinued after the 7th inst.

Case IX.—Mrs. Theresa D——s (wife of Case V.), æt. 35 years, born in United States, jet black hair, dark complexion, was seen by me on Sunday, September 18, 1853, at 9 A. M., immediately after the decease of her husband at No. 48 Penn Street. Patient gave way to a paroxysm of grief, but when I left her was more calm, and complained of nothing but pain in her back, which she imputed to fatigue from long nursing of her husband and Case III.

At 12 M., an urgent message was sent to me to visit her immediately. At 11 A. M. she had been seized with severe chills, and violent pains in head, back, and legs. Her mother had administered a mustard pediluvium, and had had six leeches applied to each temple.

Visit at 1 P. M. Patient is completely prostrated with the disease. Eyes injected, inebriate-looking; pains in head, back, and legs excessive, with a distressing sense of oppression over sternum and anterior portion of thorax, as though a very heavy weight were laid there; marked tenderness of epigastrium; heat of skin burning; pulse 120, strong and hard; tongue scarlet red; urine scanty. Patient is perfectly calm.

Ordered emetic of ipecacuanha; as soon as stomach is sufficiently settled, x. grs. each of calomel and rhubarb, to be followed, in one hour, by grs. x. quinia; the same dose to be afterwards repeated at same interval. Steam to be applied to surface of body.

9 P. M. Patient is in profuse perspiration; eyes more injected; pains undiminished, complaining most of those in head and across thorax; has slept considerably during the day; some deafness from quinia; no nausea; has borne medicines well, having rejected quinia but once; has had two dejections; no urination.

September 19, 9 A. M. Patient has slept much during night and morning, but is easily roused; temperature of skin but little more exalted than natural; it is very yellow, however; nausea considerable, but no vomiting; tongue bright red; epigastric tenderness very marked.

Apply six leeches to anus, ice to head, sinapisms to epigastrium and extremities. Take grs. v. quinia every two hours, creasote mixture one tablespoonful every two hours, iced mucilaginous drinks.

9 P. M. Patient is more comfortable; still very drowsy; on being roused, complains of pains in head and chest; the tongue is, however, much altered, its color less bright; epigastrium less tender; pulse 96, regular and of good volume; skin cooler, yellowness very marked; extremities warm and comfortable; nausea continues, and vomits occasionally a clear, glairy fluid; no dejection; urine very scanty and high colored.

Chloroform mixture ordered instead of creasote mixture; sinapism to whole length of spine; blister to epigastrium; enema of Glauber's salts.

21*st*, 9 A. M Patient has been very restless all night, so that her blister has drawn but little; heat of skin increased; pulse 96, firm and regular; tongue as before, perhaps not quite so red; one dejection after enema last night; is more inclined to drowsiness; thirst continues; nausea very much diminished.

Continue quinia, chloroform mixture, and give grs. x. of chlor. of potash every four hours, in f℥ij. of water.

9 P. M. Condition of patient but little altered; blister has drawn well; drowsiness very great, but intelligence perfect; skin cooler; pulse 96, more feeble; tongue clean and of good color.

Continue as before; also, enema of Glauber's salts, and sinapisms to spine and extremities. Weak brandy and water in small quantities.

22*d*, 9 A. M. Patient is awake at time of visit; less pain in head, back, and legs; skin somewhat cool; extremities very warm;

acknowledges that she feels much better; no nausea; no vomiting; pulse 96, of moderate strength and fulness; a short time before visit, patient had a black stool.

Continue quinia, &c.; increase strength of brandy and water, and give more frequently.

At 2 P. M. patient is calm and cheerful; has no pain; but little nausea; temperature of skin comfortably warm; extremities hot; has had several black dejections; vomited, a half hour ago, about one tablespoonful of blood.

Suspend quinia; carbonate of ammonia, grs. v. every two hours; brandy and water; sinapism to spine.

At 10 P. M. mother reported frequent vomitings of black matter, which, upon examination of the last, shows some clear blood with it; has had several involuntary stools of same black matter; is insensible; respiration is very hurried; swallows with great difficulty; the temperature of skin is, nevertheless, uniformly warmer than natural; the pulse is 96, regular, and of good volume.

Subsequently, black matter was passed, per oram and per anum, with great rapidity, and the patient expired at 11½ P. M. of same day, being at the conclusion of the fifth day of her disease.

In reviewing his cases, Dr. S. called the attention of the Fellows of the College to the malignant character of the disease, the great tendency to hemorrhage from the nose and gums in the present epidemic; also, if recovery was to be hoped for, the absolute necessity, not only of prompt treatment, but of the removal of the patient, at the earliest moment, from the infected district. Dr. S. imputed the recovery of Case VIII., which was as severe in its access and progress as any of the other cases, to treatment outside of the locality whence the disease is thought to have originated.

Case V. seemed to have passed the crisis of the disease, and to have died from absolute poisoning of his system from continued exposure to the causes of the disease. Also to the fact, that one of the first favorable signs of recovery was the secretion of milk in Cases II. and VIII., to induce which constant irritation had been kept on the nipple, by means of the infant or the suction glass.

A proposition (45) for Fellowship was presented.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM NOVEMBER 2, 1853, TO JANUARY 4, 1854, INCLUSIVE.

Stated Meeting, November, 2, 1853.

Dr. WOOD, President, in the chair.

Present, thirty-six members.

Drs. B. H. RAND and DAVID GILBERT were duly admitted Fellows.

The following gentlemen were elected the Committee of Publication for the ensuing twelve months:—

SAMUEL JACKSON,
ALFRED STILLÉ,
W. S. W. RUSCHENBERGER.

The Committee of Publication reported that they had issued the 2d number of Vol. II. New Series, of the *Summary of Transactions.*

Dr. HEWSON presented to the Pathological Cabinet a cast, copied from one received by him from Dr. Adams, of London, representing a fracture of the neck of the thigh-bone, in which complete bony union had taken place.

Dr. MORRIS remarked, in reference to fractures of the neck of the thigh-bone, occurring, as they so often do, in elderly persons, on the impolicy of any attempt at permanent extension and counter-extension. Bony union in these cases is seldom to be anticipated.

Dr. Morris has had several cases under his care, and, by the simple practice of letting the limb alone, has known the patients to acquire the power of walking about with the aid of a stick or crutch, even when bony union had not taken place.

The patients treated by Dr. Morris were retained in bed for the first five or six days, after which they were allowed to sit up in a chair, with such a disposition of the injured limb as contributed most to their comfort.

Dr. Morris desired to be understood as confining his remarks to those cases of fracture of the neck of the femoris occurring in old persons, and in which the diagnosis had been clearly determined.

Dr. JEWELL presented the following as a continuation of the

STATISTICS OF THE FEVER THAT HAS RECENTLY OCCURRED IN OUR MIDST.

In accordance with our original intention, we present to the College a continuation of the cases of yellow or malignant fever that have occurred in our city during the past summer.

The tabular form, which we have adopted for convenience and reference, will be found to contain all cases reported to the Board of Health, together with others not reported, in addition to those already published in the *Transactions*. At a former meeting of the College, we presented an account of cases, up to August 31, in tabular form, complete as far as practicable; but expressed a doubt as to our having secured an entire list. Since then, we have come into possession of other cases that happened during August, but which had not been made public. This will account for an apparent discrepancy in the table now offered, by the insertion of cases as early as August 7, but which are not to be found in the table inserted in the October number of the *Transactions*, which proposes to include all cases to August 31.

We have taken some pains in order to secure a complete list, and feel assured that while we may have failed to make out a

perfect statistical account of every case that wore the livery of a malignant type of fever, we have been able to record, not only every case of death from yellow or malignant fever, but also those cases of recovery in which there was no hesitation in deciding their true character.

There have been, doubtless, cases that presented many of the symptoms of yellow fever in the forming stage, but which, in a few days, yielding to a judicious treatment, were not reported. The genuine character of others, again, being questioned, it was not deemed prudent to report doubtful cases; while some few practitioners, either from indifference, or else questioning the authority of the Board of Health to require reports of malignant cases of disease, or, taking the position of its entire uselessness, have not reported at all.

The exceptions, however, we believe to have been too few to alter materially the statistical results.

The whole number of cases registered from July 19 (when the first case occurred), to October 7, the date of the last case, a period of two months and nineteen days, has reached the total of 170.

An examination of the records of the Board of Health will show that the cases reported were not, in every instance, under the name of yellow fever; the greater part of them have been designated as malignant bilious, malignant, pernicious, typhus icterodes, &c.

The deaths have been 128, equivalent to 1 in every 1.42 hundredths, or 75 per cent. of the whole. A fearful mortality. Had every case that wore the aspect of a malignant type of fever been recorded, the list of cases would have been increased, while the percentage of deaths would have presented a more favorable appearance.

We have made no attempt to calculate the proportion of cases, or even of deaths, to the population in the infected district. The information required for anything like an accurate estimate could not have been readily obtained. All we can offer is, that the population involved was by no means a crowded one. The resident population of that locality where the first nineteen cases occurred, bounded by the south side of South Street, the west side of Little Water Street, Lombard Street, and the Delaware front, do not exceed one hundred. The whole of the district

where the fever prevailed, to which we have ascribed limits, extending from Union Street north, to Queen Street south, Second Street west, and the Delaware on the east, does not by any means contain an excess of inhabitants. We may conclude, then, with some degree of correctness, that the disease was not sustained by an over-crowded population. The whole neighborhood, however, may be considered as favorable to the production and nourishment of malarious fevers, in view of its proximity to the river docks, the open sewer at South Street wharf, the damp cellars, filthy alleys, and other local causes of disease, under such a long-continued high thermometrical atmosphere, as prevailed during the months of July, August, and September. That of July being 77.14 degrees, about two degrees above the average mean for many years; August, 76.76, or nearly four degrees above the common average for that month, according to Dr. Swift's review of the weather, published in the *Medical News*.

While the disease in general has been confined to narrow limits, a few cases of genuine yellow fever have originated beyond the boundaries, between which and the infected district no direct communication could be traced. It is proper, however, to observe, that in several of these cases there was, either by a residence, or through business operations, more or less communication with the wharves along the Delaware front.

Of the 170 cases, 147 may be traced directly to the infected locality, or its immediate vicinity. Twenty-two are of doubtful or unknown origin; while in one instance, that of Matthias Pettigrew, the disease was contracted at the Lazaretto station, where he had been at work on board the ship Caledonia Brander, from New Orleans.*

One hundred and eighteen of all the cases reported were treated in private practice; twenty-four at the Pennsylvania Hospital; eighteen at the Blockley Hospital; seven at the Bush Hill, or City Hospital; and three at St. Joseph's, on Green Hill.

In no instance can it be shown that the disease has spread from those laboring under the fever. At the Pennsylvania Hospital, the yellow fever cases were intermixed in wards with numerous other patients, some ill, and others convalescing from disease, but

* This vessel had yellow fever on board when she arrived.

not an individual, either among the patients, nurses, or visitors, contracted the fever. The like immunity was observed with the cases treated in the Blockley, St. Joseph's, and Bush Hill Hospitals. In private practice, although numerous cases were attended away from the infected portion of the city, we have yet to learn that the disease, in a single instance, was propagated from the sick to the well, although there was an unrestrained intercourse between the patients and their immediate friends.

The only case that bears any resemblance whatever to the disease being communicated from patient to attendant, is that of Daniel Shanachan's wife. These people resided in North Front Street, near Callowhill, full a mile and a half north of South Street, but within a few rods of the Delaware front. No history could be obtained from Daniel as to where he contracted his disease, as he was in a dying condition when first seen. His business, however, was to put coal in cellars, in various parts of the city. He died on the 30th of September with black vomit, after six days' illness. His wife, Mary Shanachan, who took care of him, sickened on the 28th, four days after her husband, and died in the City Hospital, on the 1st of October, with black vomit. The examination of her body, after death, left no doubt as to the genuine character of her disease. This woman declared that, so far from visiting the vicinity of South Street, she had not even crossed the threshold of her own door for several weeks, having a family of small children around her. The room she occupied, the third story front of an unfinished warehouse, was very filthy, but large, and by no means confined. The whole upper part of the building was rented out, in rooms, to different families of the low order of Irish; everything around presenting poverty, rags, and filth. This case of Mary Shanachan is one of those that the advocates for contagion would readily seize upon to sustain their peculiar views; but a careful review of all the circumstances that enter into its history, will set at rest the least suspicion that the wife contracted the disease from her husband.

On the 22d of the same month (September), Michael Palmer, residing in Willow Street, two doors west of Front Street, and about one square north of Shanachan's residence, was taken ill with yellow fever. This man unhesitatingly declared that he was not acquainted with the lower part of the city; did not know

that he had ever been in the vicinity of South Street wharf; was a shoemaker; worked in Front Street above Noble, and was not in the habit of going anywhere else, but from his shop to his residence in Willow Street. He had no knowledge of Shanachan's family. The question will be asked, where did Palmer contract his fever? Not from contagion, nor from a visit to the infected district, but from a residence in the immediate vicinity of Willow Street wharf, where the culvert along Pegg's Run empties into the Delaware, which outlet, at low tide, is fully exposed, and where at all times there is a large deposit of putrefying vegetable and animal remains. This state of things, with the intense heat of the weather, aided, in all probability, by an epidemic influence stealthily creeping along the wharves from the infected locality, was doubtless the cause, not only of Palmer's sickness, but also Shanachan's, as he must have passed this culvert daily, on his way to the coal-yards at Noble and Green Street wharves, where he was in the habit of obtaining employment. His wife, no doubt, contracted her disease from the same source of infection, as her statement was not confirmed, that she had not been out for weeks; and if it had been, she was sufficiently near to have inhaled the poisoned atmosphere without absenting herself from home. Had it been from a contagious principle emanating from her husband's person, the general period allotted for the process of incubation had not expired before she was taken sick, on the fourth day after her husband. And under the circumstances in which the house and the several families occupying it, in all their filth, were situated, we should certainly have looked for other cases of fever, there being free and direct intercourse between all the inmates. Not another case, however, happened within these premises. Hence, we conclude that the origin of Mary Shanachan's fever is as fully established as that of her husband and Palmer's; that contagion played no part in the drama; but that a miasmatic constitution of the atmosphere existed in that vicinity, from the inhalation of which these individuals contracted the fever, resulting in the death of two of them.

Ninety of all the cases were accompanied with black vomit; equal to 53 per cent. Of these, all died except four, viz. John Reehil, aged 20; Ellen Parr, aged 20; Mrs. Lindsay, aged 28; and James Sweeny, aged 12. The genuineness of the discharge

in Ellen Parr's case has been doubted, as stated in a former communication. As black vomit has generally been considered to be a fatal symptom in yellow fever, we should always have some hesitation in relying upon the evidence of recovery after it has occurred, however high the authority from which the statement comes, unless the matter has been carefully submitted to the field of the microscope, and blood corpuscles found therein.

The sexes suffered nearly alike from the effects of the fever; the preponderance, however, being on the side of the males. Ninety-three of the cases on record were males, and seventy-seven were females.

A large proportion of those attacked were foreigners, viz. 102. Of these, 62 were born in Ireland, 19 in Germany, 18 in England, 1 in Scotland, 1 in France, and 1 in Spain. The remainder (68) were natives of the United States.

The colored population appear to have been specially exempt from the disease. We have not on record a single case, nor could we learn of any black person having had the fever. This supposed immunity of the colored race from attacks of yellow fever has been elsewhere observed; but in the fever of 1793, in this city, Dr. Rush says, "they took the disease in common with the white people."*

The duration of the attack in those who died was from two to twenty-four days. The mean was a fraction less than six days.

But few children appear to have had the disease. Under ten years of age there were only six. One of these, Rudolph Westhold, was but three weeks old. This child survived until the twenty-fourth day. Its father died on the sixth, and its mother on the fourth day of their disease. Another child, aged nine years, of the same family, recovered. William Hawkesworth, aged four months, died after one day's illness. It had nursed its mother until within two days of her death, she having died of the fever, at the Pennsylvania Hospital, on the sixth day of her attack.

It may not be improper to notice here, that several cases of yellow fever have occurred in Camden, New Jersey, opposite the city, in individuals who contracted the disease from having inter-

* Rush's Works, vol. iii. p. 151.

course with the vicinity of South Street wharf, by crossing at the ferry. One case also happened in Woodbury, N. J., in the person of a young man, who had been on a visit to the city, and who crossed the river from the South Street Ferry.

Among the certificates of death to be found on record at the Health Office, is one of malignant bilious fever, dated Bridesburg, September 27, and another, dated Tacony, October 24, from malignant fever. Of these we have taken no notice in the table, they not having been attended in the city or districts.

Another circumstance, proper to allude to, because a matter of record, and may be noticed in another place, is, that on searching the register of deaths at the Health Office, we find a certificate of May 17, 1853, of death from pernicious fever; and another, signed by the same physician, of June 20, 1853, from pernicious fever. After the strictest inquiry of the gentleman who attended these cases, we are satisfied that neither of them bore any resemblance whatever to the disease in question, nor did either of them occur anywhere in the neighborhood of South Street wharf. Moreover, we should deem it decidedly wrong, from our knowledge of these cases, to attempt to establish the fact, that isolated cases of yellow fever existed in our city as early as May and June, founded upon the evidence of these certificates.

The increase of deaths from all causes in our city for the last three months, over those for the same period in 1852, has been equal to 7 per cent.; but, as we have shown in our published statistics of mortality, the deaths from endemic, or contagious, zymotic, or epidemic diseases, for the last three months, have only exceeded those in 1852, for the like quarter, by nineteen. It may, therefore, be safely inferred that, although there has been an increase of 7 per cent. in the total of deaths for the third quarter of 1853, over the total in the like period of 1852, the percentage has not been caused by an increase of deaths from the zymotic or epidemic class, in which fevers are included, but must have been from other causes of a general character.

Continuation of Yellow Fever Cases in Philadelphia, from July 19 to October 7, 1858, in the numerical order, &c. &c. in which they occurred.

No.	Name.	Age.	Sex.	Nativity.	Where contracted.	Date of attack.	Where attended.	By whom.	Days sick.	Black vomit.	Died.	Recovered.
46	John Petrie	17	M.	England	Lombard Street wharf	Aug. 7	Ship Briesis (English)	Dr. W. Sharpe	2	Black vomit.	Aug. 9	
46	Robert Kebben	48	M.	Ireland	South Street wharf	" 8	Court near Navy Yard	" D. F. Condie	11		" 19	
47	Mrs. Halstead	25	F.	U. States	82 Swanson Street	" 13	82 Swanson Street	" M. Anderson				Recovered.
48	Amelia Taylor	24	F.	England	Penn Street below South	" 16	Penn Street below South	" J. Gegan	15		" 31	
49	Nathan Eells	19	M.	U. States	Penn Street below Lombard	" 17	Penn St. below Lombard	" M. Anderson				"
50	Mary Coffee	30	F.	Ireland	Penn Street above South	" 17	Penn Street above South	" F. Scoffin	8	"	" 25	
51	William Bosman	25	M.	U. States	22 Swanson Street	" 19	22 Swanson Street	" J. Gegan	5	"	" 24	
52	Mary Dougherty	33	F.	England	Penn Street below South	" 20	Penn Street below South	" "	5	"	" 25	
53	Catharine Mickle	19	F.	U. States	Little Water St. near Lombard	" 21	Fifth and German Sts.	" D. F. Condie	11		Sept. 1	
54	John H. Jones	42	M.	England	22 Swanson Street	" 22	22 Swanson Street	" J. Gegan	3		Aug. 25	
55	Mary Ann Oliver	25	F.	Ireland	70 Penn Street	" 22	70 Penn Street	" "	9		" 31	
56	Patrick Farrell	38	M.	"	Penn Street below South	" 25	Penn Street below South	" "	6		" 31	
57	Margaret Stewart	19	F.	U. States	20 Swanson Street	" 26	20 Swanson Street	" "	11	"	Sept. 6	
58	Richard B. H——e	7	M.	"	22 Swanson Street	" 29	22 Swanson Street	" A. E. Stocker	5	"	" 4	
59	Thomas Blake	45	M.	Ireland	Unknown	" 30	Blockley Hospital	" J. Stewart	21		" 19	
60	Samuel B. Bailey	45	M.	England	Almond Street wharf	" 31	69 Pine Street	" J. Kitchen				"
61	Rachel R——e	17	F.	U. States	22 Swanson Street	" 31	22 Swanson Street	" A. E. Stocker				"
62	Elizabeth Wrinch	35	F.	Ireland	77 Swanson Street	Sept. 1	77 Swanson Street	" T. S. Reed	3		" 4	
63	Herman Segebarth	38	M.	Germany	Mead Street wharf	" 2	Pennsylvania Hospital	" W. Gerhard				"
64	David Shoal	44	M.	"	Unknown	" 3	Blockley Hospital	" J. Stewart	2	"	" 5	
65	Thomas Mullen	35	M.	Ireland	10 Swanson Street	" 3	10 Swanson Street	" J. Gegan	5	"	" 8	
66	Peter Brumshagen	25	M.	Germany	Mead Street wharf	" 3	Pennsylvania Hospital	" W. Gerhard	5	"	" 8	
67	Ludwig Drews	27	M.	"	"	" 4	" "	" "	7	"	" 11	
68	Joseph Rivel	30	M.	U. States	Penn and South Streets	" 4	Stone House Lane	" W. Henry				"
69	Charles Stevenson	40	M.	England	South Street wharf	" 4	Marion St. above Second	" J. W. Jones	2	"	" 6	
70	Samuel McC. A. S—th	17	M.	U. States	"	" 4	3 Swanson Street	" A. E. Stocker	4	"	" 8	
71	Mary T——s	23	F.	France	8 Lombard Street	" 5	8 Lombard Street	" "	8	"	" 13	
72	Fannie McDowell	16	F.	U. States	South Street wharf	" 6	257 South Front Street	" Isaac Hays				"
73	John Welsh	54	M.	Ireland	Unknown	" 6	Blockley Hospital	" J. Stewart		"	" 7	
74	Willis Carlisle	23	M.	U. States	Schooner Sarah Elizabeth	" 7	Pennsylvania Hospital	" W. Gerhard	3	"	" 11	
75	Mary Thompson	33	F.	"	Swanson Street below Almond	" 7	Swanson St. bel. Almond	" Griscom	7	"	" 14	
76	Catharine Yeager	38	F.	"	Front and South Streets	" 8	Catharine St. bel. Sixth	" M. Anderson	5	"	" 13	
77	Mrs. Lindsay	28	F.	"	Penn Street below Shippen	" 8	Penn St. below Shippen	" J. Gegan		"		"
78	Anna Welsh	29	F.	Ireland	Penn Street near Shippen	" 8	121 Catharine Street	" R. Gardiner	13		" 21	
79	Georgiana McDowell	19	F.	U. States	South Street wharf	" 8	257 South Front Street	" Isaac Hays	6	"	" 14	
80	Elizabeth Duguan	48	F.	Ireland	Swanson Street	" 8	Swanson Street	" J. Gegan	4		" 12	
81	Catharine Foley	22	F.	"	Bedford Street	" 9	Blockley Hospital	" J. Stewart	17	"	" 26	
82	Margaret Sweeny	43	F.	"	9 Swanson Street	" 10	9 Swanson Street	" J. Gegan				"
83	Beulah Higgins	30	F.	U. States	Wharf below Lombard Street	" 10	Clement's Hotel	" Wm. Klapp		"		"

Table of Yellow Fever Cases in Philadelphia—Continued.

No.	Name.	Age.	Sex.	Nativity.	Where contracted.	Date of attack.	Where attended.	By whom.	Days sick.	Black vomit.	Died.	Recovered.
84	Mrs. Arthur	25	F.	U. States	81 Penn Street	Sept. 11	81 Penn Street	Dr. J. Gegan	5	Black vomit.	Sept. 16	
85	Rudolph Westhold	3 w.	M.	"	9 Shields' Court, Relief Street	" 11	9 Shields' Court, Relief St.	" G. Winkler	24		Oct. 5	
86	Wilhelmina Westhold	33	F.	Germany	" "	" 11	" "	" "	4	"	Sept. 15	
87	William Westhold	48	M.	"	" "	" 11	" "	" "	6	"	" 17	
88	Charles Westhold	9	M.	"	" "	" 11	" "	" "				Recovered.
89	Ann McDermott	45	F.	Ireland	44 Shippen Street	" 11	44 Shippen Street	" J. Gegan	2	"	" 13	
90	Edward McCrea	34	M.	"	Lombard Street wharf	" 11	Owen Street	" A. H. Graham	8	"	" 19	
91	Harriet Green	28	F.	U. States	Shippen and Swanson Streets	" 11	Shippen and Swanson Sts.	" S. Chamberlain	4	"	" 15	
92	William D——s	35	M.	"	48 Penn Street	" 11	48 Penn Street	" A. E. Stocker	7		" 18	
93	Jacob N. Bowan	41	M.	Germany	Penn Street below Lombard	" 11	Penn St. below Lombard	" M. Anderson	6		" 17	
94	John Young	34	M.	U. States	Wharf below Pine Street	" 12	Arch St. above Seventh	" B. Berens	5	"	" 17	
95	Mrs. Winters	35	F.	Ireland	Relief Place, Relief Street	" 13	Relief Street	" J. Gegan				"
96	Catharine Dwyre	16	F.	U. States	Little Oak Street, Moyamensing	" 13	Blockley Hospital	" J. Stewart	4	"	" 17	
97	Neil Sweeny	48	M.	Ireland	9 Swanson Street	" 13	9 Swanson Street	" J. Gegan	4	"	" 17	
98	James Sweeny	12	M.	U. States	"	" 13	"	" "		"		"
99	Anna Merrick	50	F.	England	88 Penn Street	" 13	"	" "	5	"	" 18	
100	Cath. Cunningham	16	F.	Ireland	26 Swanson Street	" 14	Blockley Hospital	" J. Stewart	15	"	" 29	
101	Anthony Straum	25	M	Germany	Swanson and Catharine Streets	" 14	Front St. and Palm Alley	" C. E. Kamerly	4	"	" 18	
102	William M——n	25	M.	England	48 Penn Street	" 14	48 Penn Street	" A. E. Stocker				"
103	Charles Davis	22	M.	Spain	71 Penn Street	" 14	71 Penn St.	" J. Gegan	4	"	" 18	
104	Hiram Magee	12	M.	U. States	S. E. corner Penn and Shippen Sts.	" 14	Penn and Shippen Sts.	" "	14		" 28	
105	Phineas Harris	72	M.	"	Swanson and Almond Streets	" 15	Swanson and Almond Sts.	" "	3		" 18	
106	Jacob H——e	48	M.	"	22 Swanson Street	" 15	22 Swanson Street	" A. E. Stocker				"
107	Susan L——d	25	F.	"	407 South Front Street	" 15	407 South Front Street	" "				"
108	Cochran Fay	28	M.	Ireland	Almond Street wharf	" 15	Bingham's Court	" M. C. O'Hara	7	"	" 22	
109	William B. Wyle	20	M.	U. States	Chestnut Street wharf	" 16	Sch. Seventh & Vine Sts.	" P. B. Goddard	3	"	" 19	
110	Ann Harris	62	F.	"	Swanson and Almond Streets	" 16	N. E. corner Swanson and Almond Streets	" J. Gegan				"
111	Mathias Pettigrew	30	M.	Ireland	Lazaretto	" 16	Third St. & Stanley's C'rt	" T. S. Reed				"
112	George Fritz	24	M.	Germany	South Street wharf	" 17	Pennsylvania Hospital	" W. Gerhard				"
113	Theresa D——s	34	F.	U. States	48 Penn Street	" 17	48 Penn Street.	" A. E. Stocker	5	"	" 22	
114	Catharine Cussacks	40	F.	Ireland	131 South Second Street	" 17	131 South Second Street	" W. H. Hooper	23	"	" 9	
115	David L. Heaton	19	M.	U. States	Almond Street below Front	" 18	Almond St. below Front	" J. Gegan	6	"	" 24	
116	John R. Humphries	62	M.	England	18 Swanson Street	" 18	18 Swanson Street	" Philip DeYoung	7		" 25	
117	Charles McClean	40	M.	Ireland	Unknown	" 19	Blockley Hospital	" J. Stewart	3		" 22	
118	Sarah Cohen	28	F.	"	76 Almond Street	" 19	76 Almond Street	" Philip DeYoung				"
119	Sarah Hauy	42	F.	U. States	50 Swanson Street	" 19	50 Swanson Street	" J. Kitchen	4	"	" 23	
120	Patrick Daly	25	M.	Ireland	Wharf below Pine Street	" 19	City Hospital	" J. F. Bird	7	"	" 26	
121	Hiram M. Parks	13	M.	U. States	Shippen and Front Streets	" 19	Shippen and Front Sts.	" J. Gegan	11	"	" 30	
122	Mrs. Parks	28	F.	"	" "	" 19	" "	" "				"
123	Edward Barnes	21	M.	"	" "	" 19	58 Queen Street	" R. Wallace	6	"	" 25	

124	Anna Hake	18	F.	U. States	Front and Shippen Streets	Sept.	19	Front and Shippen Sts.	Dr. J. Gegan					Recovered.
125	Anna Bonner	19	F.	Ireland	309 South Front Street	"	19	309 South Front Street	" "	5	Black vomit.	Sept.	24	
126	Thomas Sedders	20	M.	England	Ship Mary Carson	"	19	Pennsylvania Hospital	" W. Gerhard	10	"	"	29	
127	Margaret Dunn	40	F.	Ireland	307 South Front Street	"	20	307 South Front Street	" W. Sharpe	10		Oct.	1	
128	William Davis	43	M.	U. States	Shippen Street wharf	"	20	64 Almond Street	" J. Wilson Moore	5	"	Sept.	25	
129	Sarah Clark	28	F.	Ireland	Unknown	"	21	Blockley Hospital	" J. Stewart					"
130	Charles Alter	46	M.	Germany	Front and Shippen Street	"	21	Pennsylvania Hospital	" W. Gerhard	3		"	24	
131	Hannah Hawksworth	22	F.	Ireland	91 Penn Street	"	21	" "	" "	6		"	27	
132	Bridget McCleane	28	F.	"	South Street wharf	"	21	City Hospital	" J. F. Bird	5	"	"	26	
133	Catharine Woolf	22	F.	Germany	Unknown	"	21	Blockley Hospital	" J. Stewart	5	"	"	26	
134	Elizabeth Homer	53	F.	U. States	28 Queen Street	"	21	28 Queen Street	" D. H. Gardiner	5	"	"	26	
135	Elizabeth Myers	43	F.	"	Coxe's Alley, Relief Street	"	21	Coxe's Alley, Relief St.	" W. Henry	4	"	"	25	
136	Benjamin Card	21	M.	England	Ship Saranac, Walnut St. Wharf	"	22	Pennsylvania Hospital	" W. Gerhard					"
137	Mary Mannin	19	F.	Ireland	69 Swanson Street	"	22	City Hospital	" J. F. Bird					"
138	Mary Barrett	48	F.	"	Front and South Streets	"	22	70 North Front Street	" J. M. Corse	6		"	28	
139	Milton Abbott	25	M.	U. States	28 Queen Street	"	22	28 Queen Street	" D. H. Gardiner	5		"	27	
140	Antone Mazely	30	M.	Germany	Almond Street below Front	"	22	Almond St. below Front	" E. S. Rickards	4		"	26	
141	Michael Palmer	32	M.	U. States	Doubtful	"	22	Willow St. above Front	" J. S. Zorns					"
142	Mrs. Farrel	84	F.	Ireland	17 Swanson Street	"	22	City Hospital	" J. F. Bird	3		"	25	
143	Catharine Nichols	36	F.	"	41 Penn Street	"	23	41 Penn Street	" J. Gegan	6	"	"	29	
144	John Hock	16	M.	Germany	Unknown	"	23	Blockley Hospital	" J. Stewart	1		"	25	
145	Mary Magee	20	F.	Ireland	Corner Swanson and Shippen Sts.	"	23	City Hospital	" J. F. Bird					"
146	Edward D. Barnett	22	M.	U. States	South Street wharf	"	24	Queen St. below Second	" J. Gegan	2		"	26	
147	Michael Parrott	4	M.	"	17 Swanson Street	"	24	Blockley Hospital	" J. Stewart	5		"	29	
148	Elizabeth Hill	24	F.	England	80 Swanson Street	"	24	80 Swanson Street	" F. Scoffin	2	"	"	26	
149	Eliza Higgins	25	F.	Ireland	South Street wharf	"	24	South St. Ferry House	" R. C. Kamerly	3	"	"	27	
150	Daniel Shanachan	45	M.	"	Doubtful	"	24	Front St. bel. Callowhill		6	"	"	30	
151	Mary Brown	25	F.	U. States	20 Queen Street	"	25	20 Queen Street	" F. Scoffin	3	"	"	28	
152	John Barrett	16	M.	Ireland	Jones's Alley, Front St. ab. Market	"	25	Pennsylvania Hospital	" W. Gerhard					"
153	Richard Hoskins	21	M.	England	Catharine Street wharf	"	25	" "	" "	4	"	"	29	
154	David Carstairs	30	M.	U. States	South Street wharf	"	26	31 Lombard Street	" W. Ashmead	3		"	29	
155	John Stewart	51	M.	Ireland	Catharine Street wharf	"	26	Pennsylvania Hospital	" W. Gerhard	7	"	Oct.	3	
156	Mary Green	30	F.	"	Southwark	"	27	Blockley Hospital	" J. Stewart					"
157	William Hawksworth	4 m.	M.	U. States	91 Penn Street	"	28	91 Penn Street	" J. Gegan	1		Sept.	28	
158	Mary Shanachan	45	F.	Ireland	Doubtful	"	28	City Hospital	" J. F. Bird	3	"	Oct.	1	
159	Elizabeth Hamilton	62	F.	"	N. W. corner Penn and South Sts.	"	28	Penn and South Streets	" F. Scoffin	5	"	"	3	
160	William Boyle	21	M.	Scotland	Catharine Street wharf	"	28	Pennsylvania Hospital	" W. Gerhard	3	"	"	6	
161	J. C. Eberback	32	M.	U. States	Front Street above Shippen	"	28	Front St. above Shippen	" W. Sharpe	9	"	"	7	
162	Richard Smith	26	M.	"	Schooner Speed, at Sea	"	28	Beck's Place	" W. Ward	15		"	13	
163	Julia O'Connor	24	F.	Ireland	7 Penn Street	"	28	Blockley Hospital	" J. Stewart					"
164	Peter Leske	35	M.	U. States	11 Swanson Street	"	29	11 Swanson Street	" W. Sharpe	3		"	2	
165	John Diamond	52	M.	Ireland	Swanson Street below South	Oct.	1	Swanson St. below South	" B. McNeal	2		"	3	
166	Ann Merricks	60	F.	U. States	254 South Front Street	"	2	254 South Front Street	" R. Gardiner					"
167	Thomas Dale	20	M.	"	South Wharves	"	2	Blockley Hospital	" J. Stewart	1	"	"	3	
168	Catharine Haven	19	F.	Germany	Unknown	"	3	"	" "					"
169	James Casseday	56	M.	U. States	27 Pine Street	"	4	27 Pine Street	" B. Berens	14	"	"	18	
170	Thomas Cecil	35	M.	"	356 South Front Street	"	7	356 South Front Street	" F. Scoffin	5	"	"	12	

Dr. GRISCOM made the following statement in regard to a case of

MEDULLARY CANCER SIMULATING AN OVARIAN TUMOR.

The subject, D. A. H., an unmarried lady of high respectability, about thirty years of age, had a dark complexion, and was above the medium height. She first consulted Dr. G., in the early part of 1852, for uneasy sensations in the left iliac region, pain in the back after walking or standing, irregularity of the menstrual function, and much distress after eating. Up to within a short period she had enjoyed good health, was cheerful, energetic, and fond of the society of her friends. Although referring the most of her suffering to her dyspeptic symptoms, she evidently considered her indisposition of a serious character. The ordinary remedies for indigestion failing to give the relief desired, more attention was given to her uneasiness in the region of the pelvis. On examination, the uterus was found abnormally small, and slightly depressed, but nothing was manifested in its condition that would satisfactorily account for the symptoms of which she complained. Her complexion now began to change; she was obviously losing flesh as well as strength and spirits, and continued to do so until the close of the year, when her system rallied. Her stomach now performed its duties with more vigor; she gained flesh, and her strength and spirits were somewhat improved; but a tumor had become manifest in the left iliac region, apparently of a spheroid shape, and about two inches in diameter; it was so movable as to almost seem to float among the intestines, and was not painful on pressure. Careful examination could detect no other tumors at this time, but there was extensive flatness on percussion in the left hypochondriac region. A few weeks subsequently two other tumors became obvious, one inside and above the first, the other inside and below it.

The diagnosis of the case was now embarrassing. That these were ovarian tumors was quite probable; nevertheless, to the mind of Dr. G. the weight of evidence was against that supposition, and serious apprehensions arose that they originated in the folds of the peritoneum and might be malignant. Early in the spring of 1853, Professor Meigs saw her in consultation. Three or more distinct tumors were now traceable through the walls of the abdomen;

the flatness on percussion continued at the left hypochondrium, and a large mass was impacted in the pelvis, forcing the uterus against the neck of the bladder, and causing great difficulty in urination, with pain afterwards. Professor Meigs pronounced it ovarian disease, and proposed the use of gum-elastic bags filled with curled hair introduced into the vagina, and gradually increased in size, in order to remove the mass from the pelvis, and thus relieve the rectum and bladder from the consequences of its rapid growth.

These bags, however, gave the patient so much pain that it was found impossible to retain them. The morbid mass grew rapidly, and her suffering from the difficulty in urinating became excessive. About the 13th of the tenth month (October), symptoms of acute peritonitis presented themselves, and on the 22d she sank, with her mind clear and composed to the last. The autopsy, which was kindly made by Dr. Neill, promised additional interest to her medical attendants from the circumstance of an earnest effort having been made, by some friends of the family, to induce them to have the tumors removed by an operation.

Dr. Neill then gave the following account of the *post-mortem* appearances in the case just related by Dr. Griscom:—

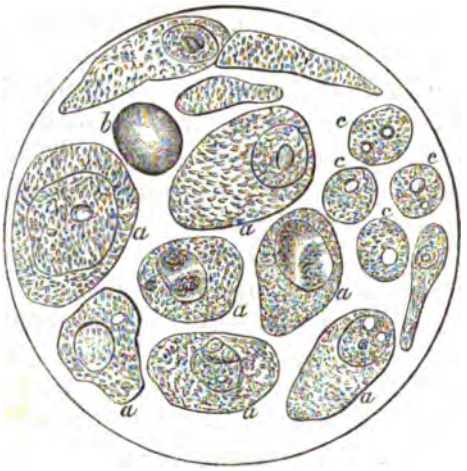
Upon examination of the body after death, the whole of the omentum majus was found to be filled with tumors varying in size, and externally of a lightish red or pink color. When these tumors were opened, they were ascertained to contain a soft cerebriform matter. The tumor that had been detected during life, situated in the left iliac fossa, was of considerable size, and enveloped by a membrane of some density. In place of the whitish cerebriform matter which formed the contents of the other tumors, this contained a soft red matter resembling bruised blood. The matter had evidently been originally of the same character as that of the other tumors, a small mass of whitish cerebriform matter being still present in the centre.

Another sac, with contents similar to this, existed between the rectum and uterus, and had pushed the latter organ forwards towards the pubis. A deposit of cerebriform matter was also detected beneath the peritoneum covering the anterior walls of the abdomen.

The liver was remarkably devoid of blood.

Upon subjecting the white matter of which the tumors were composed to the microscope, it was found to be composed of large cells with nuclei and nucleoli; free granules were very numerous —a number of fat-globules were also present. The cells were similar to those of medullary cancer. Some of them appeared to have assumed a fusiform aspect.

The character of the cerebriform matter, as revealed by the microscope, is exhibited by the annexed wood-cut, taken from a drawing by Dr. Rhoads, of the Pennsylvania Hospital.



a a a a a a a. The predominant cell—which is a cancer-cell, with very large nucleus, and one or more nucleoli.

b. Oil-globule.

c c c c. Free nuclei; the cell not yet formed.

Dr. CASPER MORRIS remarked, that a case somewhat analogous to that just related by Dr. Griscom, had fallen under his notice during the past summer.

While visiting a child, suffering from acute rheumatic fever, her father remarked, incidentally, that he had suffered occasionally from some little pain in his stomach. Dr. M. had been the family physician during many years, but had never before known this gentleman to complain. His tongue was but little coated, and there was nothing in the nature of the pain, which was referred to the epigastric region, to give rise to the suspicion that it was anything more serious than some trifling gastric disturbance;

indeed, he remarked that a personal friend, a respectable physician, to whom he had mentioned it some time before, had given him bismuth for it. He was advised to resume the same remedy, after having been slightly purged by blue mass and compound extract of colocynth. After the lapse of a week or ten days, the same complaint was repeated, the patient still prosecuting his business as usual; but, as it recurred at shorter intervals, a more accurate investigation of the cause was made, which resulted in the discovery of a hard oval tumor in the right iliac fossa. The pain had been referred to the epigastric region, instead of the seat of this tumor, which was not at all sensitive. Its form was distinctly marked, and the patient permitted the rudest handling without expressing any sense of suffering.

It was exceedingly difficult to determine the nature of the disease. There was not the tenderness nor the constitutional irritation which would have attended an abscess, or even chronic inflammation of the vermiform appendix, nor was it aneurismal. Apprehending that it might arise from glandular enlargement, consequent on some disease about the ileo-cæcal valve, the patient was directed to lie in bed, and the usual treatment for such a case enjoined. The patient objected much to the confinement, not thinking himself sufficiently sick to render it necessary. His complexion had always been anemic, though his health was good and his habits were unusually energetic and active.

In reply to the inquiry as to the existence of any tendency to scrofulous disease, it was positively denied. His appetite was good, and his bowels rather disposed to looseness, which was checked from time to time by the use of opium and blue mass. The pulse became as frequent as 115 to 120 per minute. Occasionally there were severe attacks of pain, and these were always induced by any purgative medicine. The tumor remained stationary as to size and character, and the condition of the patient unchanged during at least twelve weeks; after which there was some enlargement and softening of a portion of the tumor. The bowels now began to be occasionally obstructed, and soon stercoraceous vomiting became a frequent source of distress. Drs. Norris and Dillard saw him with me, and coincided in the opinion that the case was, in all probability, one of glandular disease, caused by ulceration about the cæcum or its appendix. As the stercoraceous vomiting

continued, even when the bowels were freely moved, it was evident there was no hernia, or obstruction of the intestinal canal. The urgency of the symptoms demanded that something should be attempted for his relief; and with the consent and co-operation of Dr. Betton, an exploring trocar was passed into the soft part of the tumor, which gave vent to ill-conditioned, dark, fetid pus. Collapse, which had been imminent for some hours, soon supervened, and the patient died. A *post-mortem* examination exhibited a large cancerous deposit in the mesentery, extending from the lowest to the highest part of that fold of the peritoneum, and inclosing the cæcum in it. The liver was also studded with spots of scirrhus.

We were now for the first time informed that the father of this gentleman had died of "abscess of the bowels," under the care of Dr. Physick, who had suggested that it might possibly have been owing to the swallowing of a cherry or peach-stone, which had lodged about the cæcum, and that a brother and sister had also died of some constitutional disease, which was not understood by the medical attendants. The nature of the degeneration was proved by microscopic examination.

Another patient was at the same time under the advice of Dr. M., whose case also terminated fatally, and was proved by examination, to be of the same nature. The patient had been actively engaged in business till within about three months of the time of his death, suffering only from occasional attacks of headache, accompanied by sick stomach. His intelligence had been perfect, and his mental activity very great. Before coming under the care of Dr. M. he had been under the treatment of other physicians. When Dr. M. first saw him, the leading features in the case were an inability to command language, and a slight distortion of the face, and considerable emaciation. He would sit silent all day, and made no complaint of pain in any part of his body. The alvine evacuations were generally natural; but occasional discharges of blood had caused the gentleman under whose care he had been to examine the rectum, without finding any disease. He never alluded to any pain in the abdomen; but an accidental circumstance led to the discovery of a large tumor in the lower part of that cavity, presenting externally the features of a large fecal accumulation. He soon after died, and an examination of

the body disclosed extensive scirrhus of the contents of the abdomen. The intestines were so agglutinated and ulcerated, that it was impossible to trace their course. On opening the cranium, a hard tumor was found imbedded in the anterior lobe of the cerebrum on the side toward which the muscles of the face were contracted.

Stated Meeting, December 7, 1853.

Dr. WOOD, President, in the chair.

Present, thirty-eight members.

Dr. JACKSON, late of Northumberland, read the following paper on—

THE USE OF CALOMEL IN THE DISEASES OF CHILDREN.

Calomel plays so great a part in therapeutics, that it behooves those who are alone responsible for the evil it may sometimes cause, to open their eyes and their ears, lest they may carelessly let any floating knowledge escape them. It is moreover the duty of every physician to contribute something to the common stock, if chance may have brought anything before him worthy of communication.

It is well known to us all that when calomel is given in frequent small doses, during several successive days, it has been suspected of falling on the maxillæ of children, and causing caries and exfoliation. I have had three cases of this misfortune in my own practice, a strong and startling fact which has led me to inquire from my brethren and from books concerning similar mishaps in the lives of others. From this double source of information, I hope to give you some facts and thoughts that may arrest your attention, and finally cause some excogitations that may prove useful in the edification of our science. They may thus be made to float down the stream of time, and prove to be "bread cast on the waters;" or should they, like the poet's blockhead, sink with-

out a bubble,* they may yet, like the poet's Arethusa, rise a refreshing fountain at some future time.

In entering on this precarious subject, permit me to state, that I have never undertaken to salivate a child under eight years old, or even to bring him so far under the influence of mercury, that the breath and gums might be affected in the slightest degree. That divine old man, Dr. Rush, used to caution us against attempting to salivate children under six years of age; and there now lie before me some notes, written by myself from his own mouth, in which notes are these admonitory words: "Salivation is forbidden in children under six years old, for their tender jaws are not able to withstand the powerful stimulus of the mercurial anguish; they run into gangrene."

From the very beginning of my practice to the present time, now forty-two years, I have used calomel pretty freely; but I have never been tempted to give children repeated doses as an alterative remedy, without those alarming words of the great master then sounding in my ears; yet, notwithstanding this preventive precept, I have been afflicted, as above stated, with three cases of caries of the jaw. These I published in the *Med. Recorder*, vol. xii., being included in an essay which I wrote on another subject; and as they are related with brevity, I will here quote them entire.

CASE I.—A child of three years old I bled frequently for inflammation of the lungs, which had run on too long without medical aid. Tartar emetic was constantly given in nauseating doses, blisters were used freely, and finally, when no more blood could be let, the calomel was given in doses of five grains, twice a day, as an expectorant, and the tartar emetic was given during the intervening hours, as fast as the stomach and bowels could bear it. The cough became loose in a few days, and the fever abated; but the child's breath was now intolerably offensive, and upon examination, I found the lower teeth on one side loose, and the gums fallen off. The teeth were easily removed, and the mouth was washed with charcoal and diluted Hux. tinct. The alveolar processes came away, and the ulcer healed without difficulty. The breath was not mercurial, nor was there any ptyalism.

* Demersus summâ rursus non bullit in undâ. Pers. III. 34.

CASE II.—A little boy, eight years old, had the epidemic remittent fever, for which he took, towards the decline of the disease, several doses of calomel, each ten grains, without any other cathartic. After a few days, he complained that his upper jaw was sore, and, upon examination, I found that his teeth were loose and the gums fallen off. As in the above case, there was no ptyalism, and the breath was offensive but not mercurial. The mouth was washed with diluted Hux. tinct., and, as he complained of headache, a blister was drawn on the back of his neck. Before the next day, the gums were gangrenous and the cheek was swelled. The teeth were very easily removed, a blister was drawn on the cheek, and the gargle continued.

Before the third day, the mortification had spread to the inside of the cheek; but it is not necessary to trace the daily progress of the disease; suffice it to say, that a large piece of the maxillary bone exfoliated, and not without great distress and general febrile irritation for several weeks. He finally recovered his health, but a little depression is still seen below the malar bone. This boy was repeatedly blistered on the cheek, the mouth was attentively washed with alum water, Hux. tinct., diluted muriatic acid, in succession and rotation, all carefully injected every hour with a syringe; and bark, with vit. and tonic diet, was given liberally, till a line of separation was distinctly formed, and the exfoliated portion found to be loose. In this case, let it be remembered that the disease did not begin in the cheek, but that it spread thither from the gums.

CASE III.—This, too, began with remittent fever, in a boy about eight years old. He took calomel several times as a purgative; and, towards the twelfth day of the disease, the teeth on one side of the lower jaw fell out, or were removed by the patient himself, and the socket exfoliated. There was ulceration, but no sloughing of the soft parts. He recovered under the same treatment that was used in the preceding case, without any external deformity.

That these cases were the effect of mercury, it is presumed there can be no doubt. The first occurred in pneumonia, and every one must know that this disease is not of a nature to affect the maxillæ; the other two cases happened in remittent fever, which

very seldom injures the bony tissue. All these children had been healthy and robust. 'Tis true their breath was not mercurial, but here remember, that this peculiar breath is the result and the proof of a certain degree of constitutional affection, which did not obtain in the present cases. The morbid effect was principally local, and therefore not apt to mercurialize the breath.

During the course of my professional years, I have met with many persons whose jaws were impeded and even deformed by this accident; some of them nearly closed, so as to prevent distinct elocution and the taking of any solid food. Several of these persons referred their misfortune to the use of mercury given them in childhood for the cure of dysentery; and Dr. Marshall Hall says, in his *Practical Observations and Suggestions*, p. 193, that he has seen several cases of this disease in children, of which one proved fatal, and he has no hesitation in referring them to mercury.

Now the sole reason of my writing on the present occasion, is to enforce the precept of Dr. Rush, that we must not attempt to salivate children under six years old; and to urge the importance of keeping in mind the danger of this injury to children, truly deplorable in itself, as also dishonorable to the physician and to the divine art we profess.

But this location of the mercurial violence is to be carefully distinguished from the "gangrenous erosion of the cheek," which I proposed, some years ago, to call *gangrænopsis*, by which name it has since been known, both in Europe and America; and to make myself explicit, I beg you to hear a few propositions.

I. The gangrænopsis attacks the cheek, the lip, or the nose, sometimes the fauces; most frequently in children, but sometimes in adults.

II. It begins in those soft parts, and never in the maxilla, often when no mercury has been used, in a debilitated and febrile state of the system, as in idiopathic fevers and dysentery. Van Swieten saw it in scurvy, and Huxham in measles. Dr. Marshall Hall says, p. 178: "In all cases which came to my knowledge, this affection had been preceded by fever, acute disorder of the digestive organs, inflammation of the lungs, variola, rubeola, or scarlatina." An exhausted state of vitality with cachectic fever is, therefore, the predisposing cause.

III. The exciting cause is any injury done to the parts. I saw it evidently started in two cases by the child's lying continually on one side, with a hand under the cheek, thus pressing the mucous membrane against the molar teeth; a protuberance of this membrane being caught between the teeth, was continually bruised, and a point of gangrene was thus established in an exanimate state of the whole system.

IV. It is sometimes the result of severe cases of cancrum oris, the irritation spreading from the gums to the cheek, a part, says some writer, that is very apt to mortify. Dr. Coates says that the cancrum oris spreads from the gums to the cheek; that "after producing gangrene and necrosis in the gums and alveoli, and after the discharge becomes acrimonious, a gangrenous spot is not unfrequently found near the opening of the Stenonian duct, on the inside of the upper or lower lip, or in the cheek." Here, then, cancrum oris is the exciting cause.

V. But now we come to our cardinal point—whether the irritation of a mercurialized jaw may not produce it, as does the cancrum oris. I am sorry to say that I had a proof of this in my own practice. I applied mercurial ointment to the face of a child about three years old, to prevent the pitting of confluent smallpox; in a few days the gums were swelled and the teeth loosened, but only in the side upon which the patient continually lay. The gums soon mortified, the gangrene spread to the cheek, bringing on a fair case of gangrænopsis, and she died of her twofold disease in a very few days. This was not a case of salivation, for the other side of the jaw remained sound, and the teeth on that side firm in their sockets.

Now I wish to be clearly understood as saying, that mercury does not directly cause gangrænopsis; that this disease, when caused by the mercurial jaw, is a mere sequela or accident, precisely as it is a sequela of the cancrum oris, the scorbutic gums, or of mechanical injury: or it may be said that the cancrum oris, the scorbutic gums, and mercurialized jaw, are its exciting causes, precisely as the bruising of the mucous membrane by the teeth is the exciting cause. Dr. Heinegan, of Columbus, in Jersey, called me to the case of a lady whose artificial teeth had bruised her gums, while she was lying low in the remittent fever; here the grangrene began in the gums and spread to the cheek, which was

soon in a state that excited great anxiety and despair. The Doctor, however, had arrested the sphacelation by undiluted hydrochloric acid, and it did not penetrate the cheek.

The gangrænopsis cannot be called a mercurial disease, for it is well known to come on in a certain debilitated, cachectic, febrile state of the body, when no mercury has been used; but mark well, it may be made a question, whether that depraved and debilitated state of the blood which this metal causes, may not increase the predisposition now prevailing in the body.

This gangrene begins in the cheek, lips, nose, or fauces; this is the purely idiopathic disease; if it comes from any irritation of the jaw, it must be an accident of such irritation. I have seen ten cases of it in my own practice, nine of which were idiopathic, one coming from the mercurialized jaw in the case of the variolous child above mentioned. In the practice of others, I must have seen at least fifteen cases; some of which were idiopathic and others the consequence, as I supposed, of the jaws injured by mercury. I have called this disease *idiopathic* when it directly attacks the cheek, lips, nose, or fauces; yet it is rather the issue of a general disease or of a general loss of vitality, in which it resembles the gangræna senilis. This last often comes on from a very trifling injury; but the enfeebled and depraved constitution cannot repair the most trifling lesion in the extremity of the circulation, and mortification ensues, or a putrefaction of the living body.

A salivation in children, or even one jaw mercurialized, may prove a very distressing affair. Dr. Marshall Hall, *loc. cit.*, has known fatal cases which he says he could easily distinguish from the idiopathic gangrenous cheek. Professor John B. Beck says that, "when salivation does take place in the infant, its effects are most disastrous; sloughing of the gums and cheeks, general prostration, and death are by no means uncommon occurrences." Dr. Ryan says: "Ptyalism in infants is often followed by sloughing of the gums and cheeks." Dr. Bedingfield says: "The whole cheek will be speedily involved, and sphacelus or rapid ulceration will be the consequence; I have seen both cheeks entirely removed by this process."* Rilliet and Barthez say: "There is no doubt

* Infant Therapeutics, by Prof. J. B. Beck.

but that this severe affection may follow a very active mercurial course, in cases wherein the cheeks are first the seat of some inflammation. Bretonneau has cited some examples in his treatise on Diphtheritis, and we have reported a work of Dr. Hueter, in which are some cases of the same." (Vol. ii. 383.) Dr. Rush says that seven fatal cases occurred in Philadelphia within the space of eight or ten years, "attended by circumstances of uncommon distress."* Dr. Charles West says: "There can be no doubt but that mercury, when given in small doses, has in a few instances produced severe ptyalism, inflammation of the mouth, loss of teeth, and necrosis of the lower jaw. In some cases, too, the inflammation has ended in gangrene of the cheek."† Dr. Marshall Hall has seen several cases of sloughing that were manifestly from mercury, and one was fatal.

Now it is certain that the mercurialized jaw is seldom deadly, unless it cause gangrene of the cheek, as it must often do in debilitated, febrile, cachectic children; therefore, those cases referred to by Beck, Ryan, Bedingfield, Hall, West, Barthez, and Rush, it is very likely, must have ended in gangrænopsis, and may have been, in some instances at least, this disease from the first, mercury, though given, not having had any agency therein. But all such cases will be imputed to this unpopular metal by the *idiotai*, let the unfortunate Doctor, however sainted, say what he may. Thus Dr. Marshall Hall attended a child in consultation, who died of the gangrenous cheek, in which case some calomel had been given. The angry father had an inquest called, and was about to prosecute the attending physician, though Dr. Hall had assured him that calomel was not the cause of his distress.‡

But physicians themselves will continue to be deceived, till they learn to distinguish the idiopathic gangrene from the sequela of the mercurialized jaw; hence they ought to think on this subject, and to be well prepared thereon. Dr. Hall says, p. 178: "The effects of calomel on the mouth, even when so great as to induce sloughing and prove fatal, are manifestly different from those of the disease under consideration." And at p. 193, he says: "Where sloughing from calomel does take place, and I have witnessed

* Rush on Hydrocephalus.

† On Dis. of Inf. and Childhood, 2d ed. p. 394.

‡ Observat. and Suggest. p. 190.

several such cases, one fatal, it is totally different in many respects from the circumscribed form of the gangræna oris."

The mercurialized jaw is not, as I have already said, a fatal disease, unless to very young, debilitated, feverish, cachectic children; nor, indeed, is the gangrænopsis dangerous, if it be seen in time, and the fever, whatever it may have been, is now resolved, so that the patient can take quinia, soup, and wine; but mark—if the fever still continue with cachectic debility, so as to prevent or pervert the agency of tonic medicine and food—*væ ægro, væ medico*—the patient will lose his face, if not his life, and the physician his peace and comfort; for no image can hover over his sleepless bed more terrific than that of a child whose living face is now rotting away. "I have seen," says Van Swieten (*Com.* sect. 432), "very terrible instances of this kind, which I cannot think of without horror; I have seen almost the whole bone of the lower jaw cast off, the tongue eroded, the lips, cheek, and chin almost entirely eaten away." "No disease," says Dr. Evanson, p. 222, "can be more frightful or formidable."

Strongly impressed with what has been feebly said in this paper, and with much that, for the sake of brevity, has not been said, I cannot but contemplate with surprise and wonder, the freedom with which mercury is sometimes given to children; and I greatly enjoy the hope, that the many thousands who were taught by Dr. Rush, have profited by his precept. He would not attempt to salivate a child under six years old, and yet this prudent man has been maliciously represented as the very Coryphæus of salivators, pouring in mercury as though he were treating patients with artificial jaws. "It is forbidden," he says, "in children under six years old"—let us see, then, what some more courageous spirits could do.

Prof. Beck says (*Inf. Therap.* p. 40): "Under various circumstances, Dr. Clarke has prescribed mercury in very *large quantities, and in a great number of cases*, and he never produced salivation, except in three instances, in any child under three years old. Dr. Warren, of Boston, has never known an infant to be salivated, notwithstanding he has given, in some cases, *large quantities with this view.* Drs. Evanson and Maunsell say: 'We have never *succeeded* in salivating a child under three years old.' Dr. Percival repeatedly observed, that *very large quantities* of ung. cœrul. may

be used in infants and children without affecting the gums." Rilliet and Barthez* say, that the greater number of practitioners add mercurial frictions to the use of calomel in the treatment of croup, in order to make it more efficacious; and that they rub in from four to fifteen grammes of ointment a day. This is the *onguent napolitain*, our ung. fortius, more than ʒss to nearly ʒss, according to the age of the croupy child. M. Bretonneau (I quote from Rilliet and Barthez, 2d ed. vol. i. 306) extols the use of mercury in croup most extravagantly, but he has observed, that it has been followed by severe symptoms *in many cases*—an extreme liquefaction of the blood, gangrene of the mouth, necrosis of a maxilla; and he fears, that a sore in the mouth may attract the mercurial influence to the cheek, and cause gangrene. Notwithstanding this, he prescribes mercury with boldness. He gives twenty centigrammes of calomel, more than three grains, every hour, and rubs in ʒss of the strong ointment every three hours. Those authoritative men, Rilliet and Barthez, recommend in *meningitis* from eight to twenty-four grammes of the strong ointment to be used every twenty-four hours, in addition to calomel, that is, from one hundred and twenty-three grains to three hundred and seventy, according to the child's age.

Now had these men, English, French, and Americans, not been more fortunate than prudent, their mercury might have led them into much trouble and sorrow. But others have been equally lucky, if they have practised their own precepts without a disaster. Dr. Charles West (2d ed. p. 206) says that, "from the very commencement of the attack, that is of croup, mercurial inunction may be had recourse to every two or three hours;" to this he adds calomel in doses of half a grain or a grain every hour or two hours, in children from two to five years old. On p. 249 he says: "A grain of calomel may be given every hour to a child from two to three years old, while at the same time a drachm of strong mercurial ointment may be rubbed into the thighs every two hours." He sets no bounds as to the continuance of this mercurializing.

In pneumonia, Dr. West gives mercury with similar freedom, and excuses himself by stating that, "in infants under five years

* 2d ed. tome i. 308.

old, the gums hardly ever become affected by mercury, though most energetically employed; and it has never yet occurred to me to meet with an instance of profuse salivation or dangerous ulceration of the gums. Such accidents, however, do now and then occur, and have been known to terminate in fatal gangrene of the cheek or necrosis of the jaw." He then cautions us to discontinue the remedy on the first indications of the local disease. Alas, it is now too late; the mischief is done, and there are no means of undoing it.

Dr. West is surely a most fortunate mercurializer who can say (p. 394): "More than 16,000 children of all ages came under my care during my connection with the Children's Infirmary, and I administered mercury to any of them who seemed to require it, but hardly ever saw salivation follow its employment before the completion of the first dentition; and I never observed the medicine, at any age, produce an affection of the mouth sufficiently serious to cause me a moment's anxiety."

But as other fallible mortals would forget two or three cases in 16,000, so Dr. West has forgotten one which he relates himself on p. 222. On the 15th of the month, he prescribed for a child in pneumonia, three years old, half a grain of calomel every three hours; on the 19th, this medicine was discontinued; on the 20th, "the gums, both in the upper and lower jaw, began to swell; by the next day they were ulcerated; the breath became very fetid, and a discolored stinking fluid ran from the mouth." * * * "The ulceration of the gums extended to the fold of the lower lip, and three of the incisor teeth fell out." She died the first of March. If the progress of this did not give the doctor a "*moment's anxiety*," if it did not disturb his appetite and his sleep, what shall we say of his nervous system?

There are many diseases in which we are sorely tempted to continue this perilous remedy to the very confines of danger. In dysentery, we might be easily led on to give small portions, often repeated, from day to day. One more dose, we may suppose, will bring green or feculent stools and save the patient; this failing, we have better hopes from another; thus, dose after dose is given, the disease continues, some accidental irritation may determine the mercurial excitement to the jaws. I have already mentioned that I have known several persons who, as well as their friends,

assured me, that their disabled jaws were owing to calomel given them in dysentery.

It has been the practice to give mercury with too much hope and security, in hydrocephalus, or that form of meningitis most beautifully described by Whytt and Quin. Calomel was given and mercurial ointment was rubbed in without fear, even in very young children; but these mercurial men did not always escape with a quiet conscience; with the poet's "brazen wall," the *nil conscire sibi nullâ pallescere culpâ;* for Dr. Ryan says (*Manual of Midw.*); "Ptyalism of infants is often followed by sloughing of the gums and cheeks; this I have known to occur after the use of it in hydrocephalus;" and Dr. Cuming (*Dub. Hos. Rep.* iv. 341) says, that in one case wherein he was induced to give calomel largely for this hydrocephalus, gangrene attacked the cheek, spread rapidly, and the child died. This would appear to be a case of gangrænopsis, probably made worse by the calomel. It was in this hydrocephalus that the prudent Dr. Rush would not give calomel without combining it with some active purgative, lest it should salivate and cause gangrene of the jaws. "Seven cases," he says, "of its inducing death from that cause, in children between three and eight years old, attended by circumstances of uncommon distress, have occurred in Philadelphia since the year 1795."*

Now it is mere vanity for any man to argue against these cautions because he has never seen such things himself. Let him remember that his testimony is merely negative, and that what he has not seen in forty years, he may see to-morrow; for Nature, to the weakness of human eyes, is a wayward something that often eludes our vision.

It is not so much the *quantity* that is to be feared as the giving of it in small and frequent doses, with the danger of salivating. As the minutest portions of lead frequently steal into the tissues and cause disease, so do the minutest doses of mercury; as large doses of lead, if not too often repeated, work off themselves or their dangerous effects, by some means not well understood, so do the large and unfrequent doses of calomel. Though both these poisons pass off in part by various emunctories, yet some portions of them are found, long after the taking thereof, closely adhering

* In. and Obs. vol. ii.

to the animal fibres. Whether this abiding in the system is common to large doses of mercury and small, is, perhaps, not certainly known, but known it is, that the same quantity, when given in large doses, is not so apt to affect the jaws as when given in divided portions.

Dr. Samuel W. Cartwright has some peculiar theories on this subject, which I will advert to, as they are buried in the pages of an obsolete periodical, the *Med. Recorder*, vol. viii. He says that small doses excite a mercurial fever, which passes off by the salivary glands; that medium doses act on the liver, greatly increasing the secretion of bile; that very large doses, twenty to thirty grs. once or twice a day, stimulate all the secretions at once, and thus prove to be a most salutary alterative, without causing salivation. He reasons plausibly, and gives many cases in proof of his doctrine. Even syphilis yields to this treatment; and patients laboring under remittent fever aggravated by salivation from small portions, have been quickly cured of their double disease by scruple doses. "Experience teaches us," says Dr. Cartwright, "that this decisive method of introducing it, so far from producing mercurial irritation or fever, on which the evils of a mercurial course depend, produces a directly opposite state of the system, by establishing a gentle yet general and permanent secretory action throughout the body."

The quantity of various medicines to be given, and the modes of giving them, is one of the most important, and yet one of the most unsettled points in the healing art. The quantum that will purge, or puke, or cure an ague, is pretty well ascertained, but the doses of tonics and alteratives are far from known. Not a physician in the whole world knows how much iron would be most conducive to health, or how much salt he ought to put into his food.

It is a vulgar opinion among physicians, that much of the calomel taken passes off by the bowels and other emunctories; hence Trousseau and Pidoux have thought it worth while to quote Beid Clanny, a writer in the *Journ. des Connais. Méd.-Chir.* Nov. 1836, a man of some authority, since Rilliet and Barthez refer to him more than once; this man thinks that one-half of all that is taken passes off in this way. He infers, then, "that the doses may be increased and repeated to the amount of one or two drachms of

calomel a day, from which a quantity may be suddenly absorbed sufficient to modify the constitution powerfully." He says that, "since he adopted this method, hydrocephalus has been to him a much less frightful disease, and that this malady, to which all his patients formerly succumbed, he has now numbered with those that are easily mastered."*

If some calomel passes away by stool, as Lehman and others positively assert, there are yet many practical reasons for supposing that, *generally*, the quantity retained and made active, is in proportion to the frequency and long continuance of the dosing. It has been supposed to pass away by urine; here some chemists have found a little, others have found none; hence the kidneys cannot be looked upon as a very active emunctory of mercury, unless through the agency of iodide of potassium. Mercury has been found in the saliva by Lehman; this shows its diffusion through the body, not its elimination; for patients are not spitting continually, unless cruelly salivated by mercury or tobacco.

Now, from the known detention of mercury in the system, ready perhaps to be rendered noxious by some accidental agent, as by iodide of potassium, we ought to infer that it is not a medicine to be given on merely common occasions, from childhood to old age. There are some families to whom mercury would seem as necessary as earth, air, fire, or water. The children have clay-colored stools—give them calomel; they have green stools—fly to your blue pills; they are costive—some mercury is called for to stimulate the liver. These notions become a portion of family education, and the children continue to practise them in adult life.

Thus I have known anxious parents who held a sweet, ripe peach in abhorrence, even when their children were well, but did ample honors to the blue pills, all which folly they learned from their family physicians. Now, it must be that persons brought up thus have their tissues filled with mercury, and are therefore in need of some medicine to relieve them of the latent and dangerous enemy.

M. Melsens has discovered that it is gathered up throughout the system by the iodide of potassium, then carried to the kidneys

* Thérapeut. par Trousseau et Pidoux, tome ii. 104.

and flooded away with the urine; but that the triple compound thus formed, though it passes quickly away, is more dangerous to the jaws than the mercury itself. This I have proved to be true as far as one fair experiment can go. I gave a young lady blue pills slowly for two weeks, till she barely perceived the coppery taste, and I the fetid breath. After some days, perhaps twenty, when the mercurial fever was supposed to have passed away, she went into the country, and took, by my advice, the iodide of potassium. The very first dose, I believe it was ten grains, brought on a surprising flow of saliva, with some soreness of the gums. She suspected the medicine of this evil, and omitted it for some days. It affected her in the same way at three several trials.

Now it has occurred to me, since I read M. Melsens' experiments, that small and very unfrequent doses of the iodide might relieve the system of its latent mercury, without exciting any very serious mercurial fever. I shall never advocate a sore mouth; I can say that it is thirty-four years since I made any one's jaws so tender that he could not have chewed his beefsteak without pain, excepting the cases of the four children spoken of above; but I am friendly to the use of mercury, and fully believe that its gentle influence is often highly beneficial; also that there are many states of the semi-diseased body that would be greatly profited by this potential alterative, thus mildly administered through the action of the iodide.

A gentle infection of mercury—I will not use the odious word salivation—if administered with due regard to the state of the system and to the peculiarities of the constitution, is often a great benefit. When I have used it for some recent disease, as dysentery, chronic diarrhœa, or pneumonia, patients often found themselves stronger and healthier than they had been for many years before. I therefore hold the sentiment I expressed twenty-five years ago, which I now copy from the *Amer. Journ. of the Med. Sci.* vol. i. Mercury will not only avert impending danger, but in many cases it will remove old obstructions, break up morbid associations, create new capacities of life, and almost regenerate the whole man; it is, with the solitary exception of cinchona, the greatest medical blessing that a benevolent Providence has conferred on suffering mankind.

Dr. C. D. MEIGS called the attention of the Fellows to the views of Professor Coste, in reference to the formation of the *decidua*. All the gentlemen present are aware that, according to the researches of Dr. Sharpey, Mr. Goodsir, and Prof. Weber, the *decidua vera* is nothing more nor less than the inner portion of the mucous membrane of the uterus, changed in its character subsequently to impregnation; and that the mucous membrane of the uterus, on its free surface, possesses a tubular glandular structure somewhat similar to that of the lining membrane of the stomach, and which, shortly after conception, becomes thickened, and greatly increased in vascularity. Now, M. Coste, instead of admitting, as was taught by Dr. Hunter, that the reflex decidua is formed by a portion of the true decidua, pushed before the ovum on its entrance into the uterus behind that so-called adventitious membrane, insists, that when the ovum enters the uterus, it becomes partially imbedded in a fold or convolution on the inner surface of the now hypertrophied decidua, which is become crimped or convoluted on its surface; and this, receiving an increased nutrition at the part with which the ovum comes in contact, grows up around the latter, and incloses it or covers it as with a hood. This extension of the decidual substance continues until it has completely filled the womb. As this increases in size, the cavity between the decidua vera and the decidua reflexa gradually disappears, and, by the end of the third month, the two layers come into contact, and are henceforth scarcely, or not at all, distinguishable.

Being some years ago in Paris, Dr. Meigs had an opportunity of inspecting the preparations and drawings of M. Coste, exhibiting the formation of the reflex decidua, with the correctness of which he was perfectly satisfied. The important point to which Dr. Meigs wished to direct attention is this, viz., that when a miscarriage occurs at three months of utero-gestation, it is not unfrequently the case that the entire ovum, with the whole of the decidual structure, both parietal and reflected, is thrown off. Now, Dr. Meigs was desirous to ascertain whether, in such cases, the female can again become pregnant. It appears to him strange, that a being standing so high in the animal scale as the human female, should be able to throw off so important a structure as the decidual apparatus of the uterus must be considered, if we

admit the views of M. Coste to be correct—and of this there would appear to be little room to doubt—and, notwithstanding, be again capable of the act of reproduction. He was not aware that, in any case in which the entire decidual structure has been thrown off in an abortion, the female has been known to become again pregnant, and he would beg the Fellows to whom the opportunity may hereafter be afforded of witnessing a case of the expulsion of an ovum enveloped with both the parietal and reflected decidua, to observe carefully whether the female in whom it occurs does or does not subsequently conceive. If she does, we must then admit that her uterus has been able to reproduce a most important organic apparatus, comprising glands innumerable, bloodvessels, nerves, absorbents, etc., which he should as soon believe, as he could believe in the power of her organism to reproduce an eye, an arm, or a leg.

A proposition (2) for Associateship was presented.

Stated Meeting, January 4, 1854.

Dr. WOOD, President, in the chair.

Present, thirty members.

The Trustees of the Building Fund presented their annual report, as follows:—

At the time of their report in January last, there remained uninvested in the hands of the Trustees the sum of seven hundred and ninety-five dollars and eighty-nine cents ($795 89).

Since then, they have received the sum of two hundred dollars, appropriated by the College ($200); contributions from individuals, through the hands of the Treasurer of the College, one hundred and eighty dollars ($180); interest and dividends on investments, five hundred and seventy-eight dollars, thirty-five cents ($578 35); and the proceeds of the sale of four shares of

Lehigh Navigation stock, at eighty-two dollars per share, three hundred and twenty-eight dollars ($328); making together the sum of twelve hundred and eighty-six dollars, thirty-five cents ($1286 35).

With these sums, the Trustees have purchased the following securities, viz.:—

Of City six per cent. gas loan	$200,	costing	$187 75
" " five " loan	1,200,	"	1,129 00
" " six " "	100,	"	99 42
" Penn District six per cent. loan	700,	"	645 75
Whole amount			2,061 92

Thus their account will stand as follows:—

Amount on hand in January last	$795 89
Whole receipts during the year 1853	1,286 35
Making together the sum of	2,082 24
Amount of investments made in 1853	2,061 92
Leaving in their hands at this date	20 32

It will have been noticed that, of the receipts during the year, the sum of three hundred and twenty-eight dollars ($328) was the proceeds of the sale of four shares of Lehigh Navigation stock. This sale the Trustees were induced to make by the very high price of the stock in the market; and the considerable subsequent fall of the stock shows that the transaction was not injudicious.

The following are the securities now belonging to the Fund, with their par value:—

Schuylkill Nav. Co.'s convertible mortgage loan	$577 50
Schuylkill Nav. Co.'s preferred stock (eight shares)	400 00
Schuylkill Nav. Co.'s common stock	51 00
Chesapeake and Delaware Canal Co.'s loan	545 16
Pennsylvania Railroad stock (four shares)	200 00
City six per cent. loan	1,600 00
City six per cent. gas loan	1,100 00
City five per cent. loan	4,800 00
City five per cent. gas loan	300 00
Spring Garden six per cent. loan	1,309 00
Penn District six per cent. loan	1,700 00
Whole amount at par	$12,573 66

The estimated value of these securities, at the present market prices, is about eleven thousand six hundred and eighty dollars ($11,680); and, if to this be added the sum now in hand, and the interest and dividends on investments now due, amounting to somewhat more than three hundred dollars ($300), it will be perceived that the present value of the fund is at least twelve thousand dollars; exceeding by somewhat over seven hundred dollars the estimated value in January, 1853.

In forming a judgment upon the increase of the fund, it is necessary to take into consideration the present depressed price of most of the securities, which will probably be but temporary; so that we may reasonably anticipate a much greater ratio of increase for the ensuing year. The Trustees would, however, urge upon the Fellows of the College the propriety of farther contributions to the Fund, and of the prompt payment of the subscriptions already made, but not yet collected.

GEO. B. WOOD,
GEO. FOX,
JNO. RODMAN PAUL, } *Trustees.*

Dr. W. P. TILDEN was elected a Fellow, and Dr. JOHN W. LEVER, of Guy's Hospital, London, was elected an Associate.

Dr. SAMUEL JACKSON, formerly of Northumberland, read the following paper, on

BLOODLETTING.

Three weeks ago, I heard a discussion by the Philadelphia County Medical Society, on the use and abuse of bloodletting, wherein the inquiry was made, why physicians have been shedding less and less blood during the last thirty years. One answer set forth that local bleeding had come more into use since French practice had been imported; a second was, that the foulness of the air, luxurious customs, sedentary habits, and other evils attending the great extension of the city, had so far enfeebled the human body that much bleeding was every year becoming less and less admissible; a third reason was pre-eminent for the comfort it would afford, if the people would only acknowledge its incontestable truth, that the great improvements gradually intro-

duced into the art of healing, had rendered the lancet less necessary.

Each of these causes has no doubt had a share in the change, and, when taken in conjunction, they may be looked upon by some as amply sufficient to account for our improvement in the use of bleeding, while, at the same time, they do the highest honor to practitioners of medicine, showing that they are not governed by prejudice, but are ever ready to profit by the developments of time.

The value of blood, as seen in the part that it plays in health and disease, has been very differently estimated at different times. The medical world was for many centuries overwhelmed by the humoral pathology, and the genius of the great Boerhaave finally wrought it up into a system, wherein acids and alkalies, and "alkalious salts," figured in the imagination and the writings of the whole profession. Soon after this, however, the blood is detruded from "this bad eminence," and an exclusive solidism, equally hypothetical, takes its place. But whatever is untrue, will not long continue, in these times of inquiry and induction; hence the blood soon rose again into importance; not by the activity of imaginative minds, but by patient thought and philosophical deductions, made in an age wherein the human mind could hardly go backward, unless to seize upon evident truth.

From this era, we may date our greater respect for blood, and our knowledge of the noble part that it plays in the animal economy; from this, too, we may date our unwillingness to pour it out with as much unconcern as we did from sixty to thirty years ago.

But as extremes must always recoil on themselves, and cause the same extremes in the opposite direction, it behooves the professors of the healing art to be ever on their guard, lest they be led astray by this troublesome principle in the human mind. Horace imputes it to fools only; yet time has clearly shown that wise men are not exempt. This is seen in the opposition that is now too strongly made to bloodletting, by many practitioners of the present time. They show caricatures of the past, make not a few misrepresentations, use vituperative language, dazzle their own eyes with phantoms of pounds that were poured out years ago, and then felicitate themselves on their own safe and "middle

way." But the physician who would derive the utmost advantage from bloodletting must often run into extremes; he must call up all his energy when death stares him in the face, and sometimes bleed to fainting, sometimes refuse to draw a single drop; and woe betide him if he fail in his duty through a desire of pleasing.

I am not attempting an elaborate argument, time does not admit thereof; I shall merely express *pro virili* some feeble thoughts, that may possibly prove as words to the wise; you know that the trumpeter in Æsop was looked upon as of more importance than the fighting men. It is, indeed, high time that some of our abler men should consider this *hæmatophobia*, which has now become prevalent and threatens through various influences to become an epidemic in our country.

When Rush, and Physick, and Griffitts, with their pupils and medical friends, undoubtedly saved many from the grave, by heroic bleeding in the yellow fever of 1793 and subsequent years, their copious effusions became very popular with physicians of the rising generation, and were transferred to the treatment of other diseases. This ought not to surprise us, when we consider the sincere happiness which physicians enjoy from any notable improvement in practice, and the enthusiasm that raises them above all selfish considerations. Rush was a teacher of medicine, and, as a religious and good man, he felt it his duty to inspire his pupils with his own mind and soul. He not only recommended earnestly what he believed to be true, but felt bound to show that the small bleedings set forth in English works, were not adequate to the subduction of our American diseases. Physicians were found in every part of our country who had been taught in foreign schools or by foreign books; hence they had not learned the proper method of treating our diseases of high excitement. Much of Dr. Rush's declamation, therefore, was directed against real prejudice and error thus largely diffused; hence, like all other orators who have a just sense of their duty, and like all energetic philanthropists, he sometimes ran into exaggerations. Erroneous physiology, too, might have sometimes led him astray. He thought that blood was very quickly generated, particularly from the patient's fat, the absorption of which was promoted by emptiness. This idea of quick restitution has

been proven to be erroneous, and hence a good reason for caution, in pouring out the living fluid. But Rush quotes Haller's *Elementa*, to prove what immense losses of blood the body will sustain; now it must be observed, that the great physiologist saw not one of these cases himself; he quotes them from authors of authority, giving them his entire credence, as did Dr. Rush. *We are always ready to believe what we wish*, is an old maxim; moreover, who could call in question facts related and believed by Haller?

Dr. Rush has been abused no little, because he has said in his *Defence of Bloodletting*, that it "should be repeated while the symptoms which first indicated it continue—should it be till four-fifths of the blood contained in the body be drawn away." Now there never was, nor will there ever be a physician who may not make an erroneous computation; but let us see if there was no reason or excuse for this well-meant extravagance. The quantity of blood has never been ascertained; Haller supposed 28 lbs.; but the authorities since his time vary from 8.5 to 44 lbs.* What was Dr. Rush's estimate I know not, but as Blumenbach was the reigning physiologist at that time, it is very probable that he took this authoritative man for his guide, and he estimates the amount to be from 8.5 to 11 lbs. Let us suppose, then, that Dr. Rush went as high as 11 lbs., and you may call to mind that more than four-fifths of this weight have often been taken in a few hours, and sometimes lost by hemorrhage with perfect safety, even when there was no congestion to afford it. Such cases, Dr. Rush quotes from *Haller's Elementa*, ii. 5.

That sneaking scepticism which could question the authority of Haller, found no place in the generous, benevolent, and credulous mind of Rush; it is probable, therefore, that he did not care whether this great physiologist and good man saw these effusions himself. But Mr. Cline, Rush tells us, drew 320 ounces from a patient in St. Thomas's Hospital, in 20 days, and that Dr. Physick drew 90 ounces from Dr. De Wees at one draft.† Now, if Rush based his calculations on 11 lbs., the greatest weight that Blumenbach ascribes, he did not err very much from his own intentions when he said, that bleeding must be continued "while the symp-

* Lehman's Physiol. Chem. ii. 269.

† Defence of Bloodletting.

toms which first indicated it continue, should it be till four-fifths of the blood be drawn away," for Haller's hemorrhages far transcended this point, while Cline and Physick's effusions made near approaches thereto. But however this may be, he was supported in his opinions by the practice of a host of pupils and medical friends, whose writings and colloquies could not fail to strengthen him greatly in his benevolent hopes. Dr. Physick was a lavish bleeder, and being at the head of surgery in the New World, and soon elevated to the professorial chair, we must attribute to his precepts and examples much of the blood that has been wasted in the United States.

During my medical pupilage, which was conducted entirely in this city, I was a regular witness to the practice of these two great men, in the Pennsylvania Hospital, and a faithful attendant on three full courses of their lectures, with the greater part of the fourth; from these opportunities of observation, carefully and often considered, I came to the conclusion long ago, that Dr. Physick was less sparing of blood than Dr. Rush. This, too, is the opinion of Dr. J. Wilson Moore, who spent five years in the hospital, and attended their patients, both public and private, having since, moreover, had many opportunities of observing Dr. Physick's private practice.

Dr. De Wees soon came into this field of labor, and lending a docile ear to the charming lectures and conversations of the eloquent teacher, he soon adopted the new practice into the obstetric art. Thus all three professorships of therapeutics were filled by men who would not call into question each other's profusion, but would rather afford mutual support and confidence.

Soon after Dr. Rush died, Dr. Chapman was placed in the chair of Practice, and he was far from being a sparing bleeder. What he taught in his lectures, I have no means of knowing, but if he may be judged from his writings, he was, with respect to bleeding, a faithful pupil of his masters, Rush and Physick. His treatment of croup is this, as may be seen in his edition of Burns, and in the *Ph. Med. and Phys. Journ.* vol. i. He begins by puking freely with tart. emet., at the same time using the warm bath; this failing, he bleeds *copiously*, and repeats the bathing and emetic; this unsuccessful, he uses topical bleeding and a blister to the throat, from ear to ear; all these failing, he bleeds to fainting, a remedy

that had never failed in his hands at that time, the fifteenth year of his practice. Now this poor child puked twice freely, bathed twice, bled copiously, leeched, and blistered from ear to ear—this child, thus broken down, is to be bled to fainting. Truly, the author of this infallible method ought not to have written, as he has done, concerning what he calls "the sanguinary spirit kindled up in the year 1793."

But, omitting whatever Dr. Chapman taught, the chair of surgery was long occupied by Dr. Physick, and Dr. De Wees was long a private lecturer, and then adjunct professor, after the death of Rush, so that this great man is not to be made answerable for all that effusion of blood of which we are now complaining. But the venerable Archiater is alone assailed by every tempest of abuse, as "the highest trees," says Horace, "are the most severely shaken by the wind, and thunderbolts strike the tops of the mountains."

Rush was not a headlong and indiscriminate bleeder; look into his *Defence of Bloodletting;* there you will find many earnest cautions, which will almost persuade you that he was timid rather than rash. When inflammation was threatening, under which no typhus lay hid, and this was certainly the case in the yellow fever, he often bled copiously; but in the manifest typhus, he seldom prescribed the loss of blood. He had been carefully educated in the school of Cullen, and had been early impressed with the radical difference between typhous and inflammatory fevers in cause, character, and method of cure. Pringle, in treating of the camp typhus, says: "If the pulse was full, I generally took away some blood;" now what says Rush, in his note on this passage? Does he say I would have taken away a great deal of blood, according to my sanguinary spirit of 1798? Far from any such sentiment. He says: "There were *now and then* cases in which the loss of *a few ounces* of blood was found to be useful in the military hospitals of the United States." But we ought surely to suspect that our Americans would require more bleeding than the British, then occupied in Dutch Brabant, where Pringle says the sandy soil is everywhere underlaid by water at the depth of only two or three feet; where the moisture and corruption of the air were much increased by alternate floodings and exsiccations.

In his Lectures on Pathology, of which I have some notes taken by myself from his own mouth, he says, that in the Revolutionary

army, the officers often required bleeding in this fever, but not the privates, who were ill-fed and debilitated. And when the typhus petechialis was prevailing in the Eastern States, I well remember with what enthusiasm Rush hailed the publications of Dr. Elisha North, wherein bleeding was utterly condemned, and excessive stimulation used. He called Dr. North a worthy pupil of Sydenham.

It is in chronic inflammation that Dr. Rush may be suspected of carrying his principles too far. No man pursued these with more ardor than he, and his opinions, too strongly expressed, may have led the inexperienced into error. It does not follow, however, that his own practice accorded with his vivid imaginations, for theories give way at the bed-side, and are lost in the light of experience.

He taught that a weak part invited disease, and predisposed to local inflammation, and such weak parts he knew that every human body afforded; hence his doctrine of the causes of dropsy, consumption, hydrocephalus, and other diseases. In his mind, every malady had a local origin, or it caused a local determination, that ought to be sought out and eradicated. Some of our American physicians made a great ovation on the arrival of the *Phlegmasies Chroniques* of M. Broussais, but if they had studied the lectures and writings of Rush, they would have seen that he, with respect to chronic inflammations, had fairly anticipated the French pathologist.

It was not, therefore, without some vexation that I read in the year 1826, in the *North American Med. and Surg. Journ.*, a review of Dr. Ayre on dropsy, wherein the writer says that some of the most intelligent of the English physicians, "so far from considering the French theories as dangerous and unphilosophical, are beginning to entertain similar views, in respect to the inflammatory nature of many diseases, too long regarded as resulting from a state of debility, and classed by the nosologists among the cachexiæ." You remember that Virgil, on being robbed of a single distich, wrote these singular and pointed verses:—

"Hos ego versiculos feci tulit alter honores;
Sic vos non vobis nidificatis, aves;
Sic vos non vobis vellera fertis, oves;
Sic vos non vobis mellificatis, apes;
Sic vos non vobis fertis aratra, boves."

But it is not my business at present to defend Dr. Rush; his writings, provided they be studiously read, and particularly his *Defence of Bloodletting*, are his best apology. If he sometimes ran into what might now be called extravagance, let us remember that he did this only in the ardent and benevolent cherishing of those feeble lights which he fondly hoped were the dawning of a brighter day. No man was more sensible than himself of the imperfections of his system, and therefore he often told his class that he was committing it to his pupils to be corrected or supplanted. Yes, O sainted shade, the total submerging of your doctrines, and even of your race and name, would have given you no pain, provided only that mankind had been benefited thereby, and the science promoted which you loved and cherished. True, indeed, is the inscription on your tomb: "Well done, thou good and faithful servant."

I have said above that extremes beget extremes in the opposite direction, that physicians seem to boast how little blood they draw, and that we are threatened with a general hæmatophobia. I have heard one great practitioner say that he has not drawn a pint of blood for a whole year; another says that he often goes out without his lancet; others say that any loss of blood is an evil not to be suffered, unless to avoid something worse. When I was in my juvenescence, probably about fifteen years old, I was overwhelmed one spring with sleepiness and oppression for several weeks, almost unable to make any exertion, or to keep open my eyes. I was bled for the first time in my life, and instantly restored to perfect health, vigor, and activity. I have often met with similar cases, and have always cured them by bleeding. Surely this loss of blood was not an evil, or did we never hear of there being too much of a good thing? Here was no disease, organic or functional, nothing but simple hyperæmia that wanted a floodgate.

As to the opinion that loss of blood is an evil to be suffered only to avoid a greater, I do not find anything new in this choosing of the less of two evils. Men who have been doctorated, are surely too old to be taught this lesson. Would they, like the schoolmaster in Perseus, feed us with pap and sing us to sleep with a *lala?* We are not now to be told for the first time that all good things have their concomitant bad things. The taking

of our daily food is a very great evil; it costs money that had better be given in charity, or spent in some intellectual gratifications; it wastes much precious time; it leads people into the temptation of eating too much, thus injuring their health; a thousand evils might be found in a few minutes, yet no one declaims against eating, no one calls it an evil to be tolerated only to eschew a greater. But I am wrong;-for Hierocles tells us, that a certain Athenian thought it a great evil to feed his horse, and that he would teach him to live without eating; the horse learned the lesson, but having learned it, he died. I would then recommend to all my brethren who look upon bleeding as an evil, and are desirous of learning to live without it, to take a hint from Hierocles, lest they die in the schooling.

But those physicians who go out without their lancet, and others who scarcely bleed a pint in a year, and those who consider every loss of blood as a deplorable evil, do they never meet with pneumonia, pleurisy, croup, phrenitis? if they do, how do they treat them? Why, there are purging, sweating, pukes, antimony, blisters, calomel, revulsives; and then we are told that they cure pleurisy in Paris with such success by warm cataplasms, that no one dies, and they cannot get a post-obit examination.

Every one knows, and even Dr. Rush has taught most earnestly, that much inflammation will often wear itself out with perfect safety; but the great object is to cure, as Celsus says, *quickly*, *safely*, and *pleasantly;* to leave nothing behind, no inflammation to become chronic, as does a certain school of modern impostors. As to the word *quickly*, if I am not greatly mistaken, this anæmatous practice must greatly prolong the cure of all severe inflammations. A bronchitis that may be cured in a few days, will be the work of a whole winter. The child that is treated for three weeks with antimony, calomel, squills, ipecacuanha, blisters, sinapisms, and bathing, is so coddled that he soon relapses, and no one can tell why, no one can say how he got a fresh cold. Then comes another course of medicine, and soon another relapse; thus the poor child is dragged on with a rattling chest, till the month of June shall have come to his relief. A physician who seldom bleeds, must confine himself to a small circle, for a large practice of dragging, relapsing patients, would allow him no time to eat or sleep.

Bleeding is generally far less detrimental to the constitution than

a long disease with continued medication. Here I shall be told that there are exceptions. I do not deny it; universal rules apply only to things that can be measured or numbered. You say that scrofula is developed by bleeding; this may sometimes happen, and yet scrofulous children will suffer less from a little bleeding than from prolonged confinement and medication. Cure these children quickly, and get them into the open air to take exercise, not forgetting bark and iron. This method is better than to save their blood at the expense of a colliquation of their whole vitality by confinement.

But some one interposes the old maxim, times are changed, and we are changed with them; diseases, we don't know why, are not as inflammatory as they were when we were young. This postulate we have often heard and as often disbelieved, having seen no difference between the croups and pleurisies of the present time and those of forty years ago.

Then a physiologist, thinking how much time it requires to perfect the new-made globuli, cries out, Have you read Marshall Hall on the loss of blood? and have you not bled your patients into a direful anæmia, or hydræmia, or at least into an oligæmia, or some undefined corruption of blood? did their heads not ache and their hearts not throb with emptiness? was there no hyperæsthesia, no *bruit de soufflet* in their necks or chests? I answer no; that I never saw this state of the body from bleeding or from hemorrhage, except in a single case, and this was one to which I had been called in consultation. When it does follow bleeding, I therefore presume that it arises from some adventitious cause. What does it come from when no blood has been lost, when it comes *sine causa externa evidente*, as Cullen says of the gout? We must refer, says Newton, the same effects to the same causes. Now, having seen this state of body very often when no blood had been shed, I cannot consider the mere losing of blood as the cause. This state of body, then, must have its own cause, and this may be a mere accidental concomitant of bleeding.

I repeat that I have seen many people well drained of their blood by hemorrhage, by sudden bleeding and by chronic, till incipient anasarca terrified the poor doctor, and yet a restorative regimen and tonics brought them soon to a state of robust health. Has not every obstetric physician seen women who had flooded almost to death, pale, bloodless, feeble, yet continually nursing the child

and recruiting their strength daily, without any of the above mentioned distressing symptoms? and has he not seen them finally restored to sound health? But you say, not every case so fortunate; I did not say every case, none but fools say this, and I am very unfriendly to this utmost grade of *numerism*, to use a fashionable word; but I do say, that health is almost the uniform result of such cases, and that I have never seen those direful consequences of letting blood set forth by Marshall Hall and others, except in a single case, and that was soon cured by bark and iron. By the way, no physician who neglects these wonderful medicines, will ever do his duty to the patient who has lost much blood.

As to the saving of this precious fluid, much will depend on the mode of taking it away; hence I would insist, that every physician should bleed his patient himself, when a recent inflammation is to be subdued. I had a specimen of the contrary practice in my own person attacked by pleurisy, and I have not forgotten what I suffered by it, though forty-seven years have since passed away. He was a young doctor, employed through charity and not choice; what do you think of this man's sending eight squares to a bleeder who might not be found at home? He should have instantly bled his patient almost to fainting, which would probably have brought on both puking and sweating. Then he should have waited half an hour, and if the pulse rose, he should have repeated the bleeding. Then he should have taken from his pocket-book a paper of tartar emetic and ordered a minute dose every half hour, to prevent the rise of inflammatory excitement during his absence. Now think on what is gained by this summary method. The patient is effectually bled and the disease is now broken; then the sending for the bleeder and the medicine, with the expense of both, are saved to the patient, the doctor not charging, of course, for such accommodations. But as a compensation far greater than money, he has the pleasure of leaving his patient improving every minute, while the mere prescriber leaves him getting worse and worse. Tis true, the man who thus does his duty, may get a bad name, he may be called a rash and tremendous bleeder, and all the *Porcupines* in the neighborhood may pierce him with their quills; while the prescriber of twelve ounces daily for a week, will be received among the safe travellers

in the "middle way." I would rather compare him to a man riding on the railroad for his life, yet afraid to go more than five miles an hour.

I have said above, that as to saving blood, much will depend on the mode of taking it away. If the patient in a recent inflammation is effectually bled once, twice, or thrice, and the arterial action kept down at the same time by tartar emetic, enemata, laxatives, diluents, and perspiration, or by cold, as the case may require, he not only gets well sooner, but he loses less blood than when this fluid is drawn off by those little portions which make no decided impression.

A physician ought to bleed often, so as to become dexterous in the work. "Bloodletting," says B. Bell, vol. iii. ch. 8, "whether we consider it as to its influence on the system, or with respect to the nicety with which it ought to be performed, is perhaps one of the most important operations in surgery. * * * Every other I have frequently seen well performed; but I have seldom seen bloodletting with the lancet correctly done. When properly performed, it is a neat operation; but when not done with exactness, it is the very reverse." To this I am sorry to add that I have seen eminent physicians go about this work as though they had never seen it. Some such spectacle as this, no doubt it was, that led Dr. Physick to question his class through every successive step of the operation; nothing did he omit, except the necessity of learning to use either hand.

It was the want of practice, no doubt, that led that eminent writer and practitioner, Dr. Charles West, to say that, "in children under eighteen months, bleeding from the arm is seldom practicable, and unless the case be urgent, it is not expedient to open the jugular." Dr. John Darwall errs in the same way. He says: "In children under two years old, it does not often happen that depletion can be performed in any other way than by leeches; occasionally, however, it is possible to open the jugular vein."

I do not believe that in the whole round of medical literature, two pages can be found that convey so much false and injurious doctrine. Let the young physician be on his guard against these errors of two excellent practitioners and writers. He will seldom find it difficult to bleed from the arm children of any age; and so far from its being inexpedient to open a jugular vein, let him

know that it will often be his bounden duty, and that he will always find the operation both easy and safe.

Dr. R. P. THOMAS related the following

CASE OF ANOMALOUS MENSTRUATION.

He was requested to visit a young married girl, on the 14th of October, 1853, said to be dangerously ill with an alarming hemorrhage from the bowels. During the evening of the preceding day (Thursday), she had passed by stool a large mass of semi-fluid blood, without having felt any previous pain, bearing down, or manifest local disturbance. For several days, she had experienced much fulness and flushing about the head and face, with some distress in the præcordial region. In the course of the night, a second discharge occurred, followed in the morning of Friday by a third. The latter was a large clotted mass that would have nearly filled a quart measure. Saturday morning there was a smaller discharge, and Sunday morning another, still less in amount; after which, all hemorrhagic symptoms disappeared. Her general condition was much relieved by the flow. At this time, the patient was in the seventh month of pregnancy. Her previous history was as follows: In December, 1852, she aborted at the third month. In January, February, and March, of the present year, she menstruated regularly. Again becoming pregnant, her menses disappeared, and there was no appearance of anything of an abnormal character until July, the fourth month of pregnancy. At which time there was a bloody discharge *per anum*, for two or three days, supposed to be of a dysenteric nature, notwithstanding the entire absence of tormina, tenesmus, and local irritation. About the same periods in August and September (the fifth and sixth months), similar discharges took place, and always from the lower bowel. The history of its return at the seventh month has been given above. In November, she described herself as having been regularly "unwell," the flow from the vagina lasting five days. She was delivered under Dr. Thomas's care, in December, of a healthy female child, at full term.

Without offering any opinion as to the true character of these discharges, or drawing any inferences in favor of preconceived

views of menstruation, this case is reported as furnishing a most singular coincidence of bloody dejections from the rectum with the periods of regular menstruation. It will be observed that prior to the fourth month there was no appearance; but from the fourth to the seventh, the flow took place from the rectum, and at the eighth from the vagina.

Dr. THOMAS related also the following

CASE OF PROCIDENTIA UTERI.

Julia C——, a widow, aged thirty-six, gave birth to her last child about three years since. Being in indigent circumstances, she was unable to observe that precaution about remaining in bed for some time after delivery, which universal experience has shown to be necessary to a safe recovery. In consequence of this, she soon felt the usual evidences of displacement of the womb; such as weight and fulness about the pelvis, dragging sensations about the groins, pains in the back, and at times difficulty in urinating. But as the symptoms were not very urgent, she continued to earn her livelihood by washing clothes. At length, in November, 1852, a tumor became developed external to the genitalia, which gradually increased in size, without giving rise at first to much disturbance, other than the mere presence of a foreign body between the limbs.

In July last, she was forced to abandon her laborious occupation, and has since been unable to use any active exertion. Many times during the past three months, there has been great difficulty in urinating.

When called to her, in the beginning of December, Dr. Thomas found a tumor, of a conical shape, five and one-half inches in length, and four inches in diameter at the middle. The apex of the cone being an orifice, three-eighths of an inch in diameter, formed by the everted vagina. The mucous epithelium was changed into an epidermis, and had lost its sensibility from thirteen months' friction of her clothes. Recognizing the character of the tumor, Dr. Thomas made an effort to replace it, but owing to the unyielding nature of the mass, failed in the attempt. The following day, the effort was renewed, after having had the tumor and surrounding parts well softened by poultices,

and the rectum and bladder emptied. By making a crease in the vagina, at the base of the tumor, and entirely around its circumference, endeavoring to render it deeper and deeper with the forefinger of the left hand, while pressure was made on the apex of the mass by the palm of the right, in the direction of the axis of the inferior strait, the displaced organ yielded and slowly ascended in the pelvis.

To secure it in position, recourse was had to the watch-spring pessary of Dr. Meigs, covered with gutta percha, as recommended by Dr. Evans. I tried this as an experiment, fearing a failure with one of a globular shape, since the vaginal walls were so hypertrophied, and the vaginal orifice so dilated, that no resistance would be offered to its immediate extrusion. Three weeks have now elapsed, and not the slightest evidence of descent has yet been manifested.

To correct the fetid discharge, injections of creasote, made in the proportion of two drops to an ounce of water, were employed for a few days. To improve the general health and promote absorption, ten drops of the solution of iodide of iron are given every three hours, combined with a good diet.

It is truly asserted that many of the so-called procidentiæ uteri are in reality nothing more than a hypertrophied condition of the vaginal walls; but in the case now reported, Dr. Thomas distinctly recognized the os uteri, by passing a finger into the constricted vaginal canal, outside of the external parts.

Objections have been urged in this city to the use of the gutta percha spring pessaries, on the double ground, that after introduction, they do not resume their elasticity, and that the material used for coating causes local irritation. If care be taken to soften the instrument in hot water before using, Dr. Thomas believes that the first objection will prove theoretical, since the snapping of the spring itself by the practitioner's fingers (which is the real cause of subsequent non-elasticity) will be thereby rendered less liable to take place. Of the force of the second he was not convinced, if ordinary attention to personal cleanliness be observed.

The patient is now entirely free from pain and uneasiness, eats and sleeps well, and is resuming her household duties.

Propositions for Fellowship (46 to 50 inclusive) were presented.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM FEBRUARY 1, 1854, TO APRIL 5, 1854, INCLUSIVE.

Stated Meeting, February 1, 1854.

Dr. Wood, President, in the chair.

Present, thirty-three members.

The Committee of Publication reported the issue of the 3d No., Vol. II., New Series, of the *Summary of Transactions*.

The following were elected delegates to the seventh session of the American Medical Association:—

Charles D. Meigs,	John D. Griscom,
Francis G. Smith,	George B. Wood,
Lewis Rodman,	J. M. Greene,
Robert C. Bridges,	S. L. Hollingsworth,
J. B. Biddle,	Samuel Lewis,
Isaac Hays,	John Neill.

On motion, the delegates elect were empowered to fill any vacancy that should occur in their number.

Dr. GRISCOM related the following

OUTLINES OF A CASE OF MEMBRANOUS CROUP IN WHICH RECOVERY TOOK PLACE UNDER THE USE OF IODIDE OF POTASSIUM.

The child, an intelligent little boy two and a half years old, had been somewhat hoarse for several days, when symptoms of dyspnœa supervened, and Dr. G. was requested to see him. He found him with a pulse somewhat quickened, an anxious expression of countenance, a *suppressed, suffocative* cough, and a labored respiration—noisy, but not resonant. During twenty-four hours these symptoms all slowly but steadily augmented, and left no doubt in the mind of Dr. G. that the little patient was passing through the incipient stage of membranous croup. Leeches, sinapisms, warm baths, and emetics (ipecac. and alum), had failed to give more than temporary relief. In looking over the resources of our art for a means of modifying the disposition to pseudo-membranous deposit in the larynx, iodide of potassium, the use of which, although without precedent in this disease, as fas as Dr. G. was aware, was selected, and administered in doses of two and a half grains every three hours.

Prof. Wood now saw the child in consultation, and had no hesitation in confirming the diagnosis. When the exhibition of the salt was commenced, the child's condition was truly distressing. The chest was heaving, the nostrils expanded, the skin of the face assuming a dusky hue—the countenance bearing that imploring expression, which, when once seen in this disease, is seldom forgotten. On consultation, it was, with some hesitation, agreed to rely on the iodide of potassium another twelve hours. At the end of that time, the child had vomited what strongly resembled plastic lymph, and the onward progress of the symptoms was certainly arrested. A very slow improvement took place from this time. The remedy was continued about ten days, at the end of which time the little patient was entirely convalescent.

Dr. JACKSON called the attention of the Fellows to the beneficial effects resulting from the inhalation of the vapor of vinegar in cases of chronic bronchitis.

TYPHOID FEVER.

Dr. WOOD presented a brief summary of his experience in the treatment of typhoid or enteric fever in the wards of the Pennsylvania Hospital during the past three months.

Since the first of November last, the number of cases under treatment was twenty-eight; some of these were in the house at the time Dr. Wood commenced his term as prescribing physician, but much the greater number were admitted subsequently. The last of the patients is now convalescent; only one case terminated fatally.

The fever exhibited, in different patients, every diversity in respect to character and severity. The head and lungs were frequently implicated in the course of the disease. In all the cases, the rose-colored spots were detected upon the abdomen, though in some they did not exceed two or three in number.

The treatment pursued by Dr. Wood was that recommended by him in his work on the *Practice of Medicine.*

In the case which terminated fatally, the patient was extremely ill when he was admitted, and died three days afterwards.

Dr. Wood remarked, that pneumonia occurring in the advanced stages of typhoid fever was a frequent cause of death, and he has been struck with the very great relief produced, whenever pneumonic symptoms supervene under these circumstances, from the application of a few cups to the chest, or, in cases of extreme prostration, where even a few ounces of blood could not be drawn without danger, from the application of dry cups.

In one instance, where the patient had been long ill—with serious affection of the head and bowels—pneumonia set in. The presence of the subcrepitant râle was detected over the whole posterior portion of the lungs; the breathing became extremely laborious, the countenance purplish and anxious, and the entire aspect of the case alarming. Dry cups were freely applied over the whole back of the chest. The relief was prompt, and, by a proper course of treatment, the patient finally recovered.

Dr. Wood adverted to the necessity of pretty free stimulation in the advanced stage of typhoid fever, even in those cases in which, from the occurrence of pneumonia, cupping may be indicated.

One of the patients who had been treated in the hospital for typhoid fever, and discharged, apparently quite well, was, after the lapse of two or three weeks, brought back laboring under all the symptoms of Bright's disease—with universal dropsy—which had come on after exposure to cold. The urine was albuminous, and contained membranous casts of the tubuli uriniferi, with oily globules indicative of fatty degeneration of the kidneys. The patient died, and, upon examination of the body, the whole of the cortical substance of the kidneys was found in a state of characteristic degeneration. There was also a fibrinous clot in the left ventricle of the heart, which had probably been formed previously to death, and impeded the circulation, causing great irregularity and smallness of the pulse, which was a striking symptom in the case.

Stated Meeting, March 1, 1854.

DR. WOOD, President, in the chair.

Present, eighteen members.

Dr. RUSCHENBERGER presented the

ANNUAL REPORT ON METEOROLOGY AND EPIDEMICS FOR 1853.

During the year 1853, the thermometer fluctuated between 9° and 94° of Fahrenheit's scale; the range being 85°. For the year 1851, the range was 87°; and, for the year 1852, it was 96°.

The mean temperature of the year was 54.56° F., which is 2.52° F. above the average mean of sixty years.

The mean temperature of the warm season is exhibited in the following table, and in comparison with the warm season of preceding years, as well as with the average mean of sixty years.

	Average mean for 60 years.	MEAN TEMPERATURE OF THE MONTH.				YEARS IN WHICH YELLOW FEVER PREVAILED.		
		1850.	1851.	1852.	1853.	1793.	1798.	1822.
May	62.94	59.83	62.58	63.31	64.32	62	65	70
June	78.12	74.00	70.40	71.78	73.56	76	74	75
July	75.78	79.20	76.82	77.04	76.10	81	80	80
August	72.10	74.50	72.40	72.22	75.14	74	77	76
September	65.47	68.00	67.46	64.79	68.11	70	69	68
Mean of the season .	69.88	71.10	69.93	69.82	71.44	72.60	73	73.80

It may be seen in the above table that the mean temperature of the warm season of the years 1793, 1798, and 1822, in which Philadelphia was visited by yellow fever, was more than two degrees above the standard mean temperature, and, also, that the warm season of 1853 was 1.56° F. above the standard. The number of deaths this year from various fevers was 10.99 per cent. of the total mortality, or nearly one and a half (1.49) per cent. greater than in the year 1850, when the mean temperature of the warm season was 1.22° F. above the standard. These facts suggest that the prevalence and fatality of fevers generally may

depend, in some manner or degree, upon the temperature of the atmosphere.

The mean temperature of the year 1853 was 54.56° F., which is 2.52° F. above the standard mean.

The quantity of rain and snow which fell during the year was 40.657 inches, which is 3.103 inches less than the yearly average.

The following table exhibits the mean temperature of the months, the range of the thermometer, and the hygrometric condition of the atmosphere. It is derived from observations made and recorded by Dr. John Conrad, at the Pennsylvania Hospital.

Meteorological Summary for the year 1853.

	TEMPERATURE.						HYGROMETRIC OBSERVATIONS.			
	9 o'clock A.M.		Mean of the month.	Range of ther.		Average for 50 years.	Dew-point at 9 A. M.	Degree of dryness at 9 A. M.	Inches of rain.	Average of 25 years.
	Max.	Min.		Max.	Min.					
January	51	15	31.80	53	9	30.46	21.25	10.55	1.845	3.23
February	52	22	36.46	60	17	29.18	25.53	10.93	4.440	2.83
March	56	22	43.03	72	18	38.24	27.48	15.55	2.462	3.72
April	68	45	52.66	78	37	51.42	37.90	14.76	3.835	3.26
May	78	50	64.32	86	46	62.94	50.64	13.68	5.178	3.53
June	85	62	73.56	94	52	73.12	60.90	12.66	1.100	3.91
July	85	68	76.10	91	62	75.58	...	...	6.296	4.29
August	84	65	75.14	93	55	72.10	66.58	8.56	3.088	4.34
September	81	50	68.11	91	41	65.47	58.11	10.00	4.463	3.30
October	69	38	53.61	75	34	53.99	40.16	13.45	3.470	3.30
November	63	25	47.80	68	23	42.67	38.86	8.94	2.320	3.53
December	42	20	33.35	59	15	31.56	21.00	12.35	2.165	3.93
For the year			54.56	94	9	52.04			40.657	43.76

The total number of deaths in the city and liberties of Philadelphia, according to the reports of the Board of Health, for the year 1853, is 9,711, which is 444 less than the aggregate mortality for the preceding year. Deducting the number of stillborn (571), the total mortality is 9,140, or 515 less than for the year 1852.

Including the stillborn, 2,722 died within the first year, 968 between one and two years, and 1,018 between two and five years. Excluding the stillborn, 4,237, or 46.33 per cent. of the mortality was of children under five years of age.

Exclusive of the stillborn, 5,033 died under twenty years, and above that age, or adults, 4,678. Of the latter, 290 had passed

the 70th, 158 the 80th, 34 the 90th, and 3 the 100th year of existence.

In estimating the healthiness or sickliness of the city from the appended quarterly tables of mortality, it is proper to exclude those reported under the following heads:—

Casualties	115	
Burns and scalds	42	
Concussion of the brain	18	
Drowned	88	
Injury	1	
Poisoning	9	
Suicide	14	
	—	287
Debility		387
Fracture		15
Old age		135
Stillborn		571
Unknown*		218
Wounds		2
Deducting this aggregate of		1,615

from the total mortality (9,711), the number of deaths from various diseases is found to be 8,096, or 527 less than the number reported for 1852.

The number of deaths from diseases of the lungs and air-passages, excluding hooping-cough, is larger than in preceding years, amounting to 2,374, or 25.97 per cent. of the total mortality.

The number of deaths from "consumption of the lungs" alone is 1,246, or 13.74 per cent. of the whole mortality, exclusive of the stillborn, which is an increase of more than three per cent. (3.26) over the year 1851, and 1.61 per cent. above the year 1852.

The following table exhibits the number of deaths from diseases of the lungs and air-passages for the years 1850, 51, 52, and 53, and for each quarter of the last year, and also the percentage of the total mortality of each of the years.

* The number of deaths set down as "unknown," or from unknown causes, is somewhat augmented by a practice of referring to this head all cases in which the attending physician's certificate of death is illegible by the clerks in the office of the Board of Health.

Mortality from Diseases of the Lungs and Air-passages.

	Annual Aggregates.				Quarters of 1853.			
	1850.	1851.	1852.	1853.	1st.	2d.	3d.	4th.
Abscess, pulmonary	12	15	16	9	4	5	...	...
Angina pectoris	...	...	8	11	4	5	...	2
Asphyxia	17	20	28	88	15	4	10	9
Asthma	13	11	14	14	4	3	3	4
Congestion of the lungs	58	68	62	46	16	8	11	11
Consumption, laryngeal	...	9	3	1	1	...	...	...
Consumption of the lungs	907	881	1182	1246	343	317	287	299
Croup	143	180	187	295	108	54	30	103
Disease of the chest	...	2	10	7	1	1	1	4
Disease of the lungs	32	28	21	34	3	11	5	15
Dropsy of the chest	68	62	46	46	10	14	10	12
Effusion on the chest	...	6	10	9	1	3	2	3
Effusion on the lungs	4	1	4	3	1	1	...	1
Emphysema	...	3	...	1	...	...	...	1
Empyema	2	2	1	1	...	1	...	...
Gangrene of the lungs	...	6	2	1	...	...	...	1
Hepatization of the lungs	...	1	1	...	...	...	...	...
Hemorrhage from the lungs	24	29	22	23	5	5	6	7
Influenza	...	6	8	2	1	1	...	...
Inflammation of the bronchi	191	175	207	195	66	37	27	65
" " chest	...	...	14	12	3	4	3	2
" " larynx	23	25	21	19	9	7	...	3
" " lungs	352	352	438	346	104	115	45	82
" " pleura	11	9	11	15	3	5	1	6
" " trachea	...	1	...	...	...	...	...	...
Totals	1850	1892	2316	2374	702	601	441	630
Hooping-cough	117	122	16	64	3	5	38	18
Totals	1967	2014	2332	2438	705	606	479	648
Total mortality, exclusive of stillborn	8025	8401	9655	9140				
Per cent. from diseases of lungs, &c.	23.05	22.50	23.98	25.97				
Per cent. from consumption of the lungs	11.30	10.48	12.13	13.74				

The number of deaths from diseases of the nervous system was 1,497, or at the rate of 15.72 per cent. of the total mortality.

The following table shows the number of deaths from nervous affections for the years 1850, 51, 52, and 53, and for the quarters of the latter year. The percentage of the total mortality is also given.

Mortality from Diseases of the Nervous System.

	Annual Aggregates.				Quarters of 1853.			
	1850.	1851.	1852.	1853.	1st.	2d.	3d.	4th.
Abscess of the brain	...	5	8	4	...	1	2	1
Apoplexy	97	85	91	112	29	24	33	26
Atrophy of the brain	...	...	2	...	...	...	...	...
Chorea	...	8	2	...	...	...	...	...
Catalepsy	...	...	1	...	...	...	...	...
Compression of the brain	5	6	1	7	2	1	3	1
Congestion of the brain	97	130	124	158	29	29	65	30
Consumption of the brain	...	2	1	...	...	...	...	...
Convulsions	444	479	488	580	132	148	154	96
Disease of the brain	88	74	99	75	20	17	24	14
Dropsy of the brain	268	245	286	190	49	47	58	36
Effusion on the brain	74	78	93	84	34	15	24	11
Epilepsy	14	28	23	19	1	5	6	7
Inflammation of the brain	218	202	254	156	47	42	41	26
Insanity	...	4	1	...	...	...	...	...
Irritation of the brain or spinal marrow	...	1	...	2	1	1	...	...
Mania	4	7	11	6	1	1	...	4
Mania à potu	54	64	52	66	13	17	29	7
Neuralgia	5	3	2	5	...	3	2	...
Palsy	71	50	77	65	18	15	17	15
Softening of the brain	10	28	16	14	6	2	1	5
Spinal meningitis	...	...	2	...	...	...	...	...
Spinal ramollissement	...	1	...	...	...	...	...	...
Teething	28	16	12	19	4	4	8	3
Tetanus	11	15	7	10	3	2	4	1
Trismus	...	5	4	6	2	3	1	...
Totals	1499	1531	1596	1483	391	377	472	288
Puerperal convulsions	...	9	16	9	1	1	2	5
" mania	...	1	6	5	1	2	2	...
Totals	1499	1541	1618	1497	393	380	476	288
Total mortality, exclusive of stillborn	8025	8401	9655	9140				
Per cent. of total mortality	18.69	18.34	16.53	15.72				

The number of deaths from diseases of some of the organs of nutrition was 2,086, or at the rate of 22.82 per cent. of the total mortality.

The number of deaths from dysentery alone was 374, or at the rate of 4.09 per cent. of the total mortality, which is 1.47 per cent. less than for the past year.

The number of deaths from cholera infantum was 395, or at the rate of 4.20 per cent. of the total mortality, which is a slight increase over the preceding year, when the rate was 3.52 per cent.

The aggregate number of deaths from diseases of the organs of nutrition, for the years 1850, 51, 52, and 53, and for the quarters of the last year, will be found in the following table.

Mortality from Diseases of some Organs of Nutrition.

	ANNUAL AGGREGATES.				QUARTERS OF 1853.			
	1850.	1851.	1852.	1853.	1st.	2d.	3d.	4th.
Abscess	14	20	8	20	3	3	9	5
" abdominal	...	1	1	1	...	1	...	...
" of the liver	3	3	7	8	...	2	...	1
Cancer of the pylorus	1	1	2	...	...	...	...	...
" stomach and bowels	24	13	14	15	6	3	4	2
Cholera	6	...	...	2	1	...	1	...
" infantum	505	397	330	395	5	34	333	23
" morbus	24	28	45	19	1	4	12	2
Cirrhosis of the liver	...	8	7	7	2	2	3	...
Colic	5	7	9	5	1	...	2	2
Colica pictonum	2	2	...	...	...	...	...	...
Constipation	...	1	1	...	...	...	...	...
Consumption of the bowels	...	1	4	13	3	2	6	2
Diarrhœa	208	157	154	130	10	24	72	24
Disease of the liver	26	13	21	18	5	4	4	5
" stomach and bowels	29	19	27	20	5	4	4	7
Dropsy	116	123	123	148	53	29	25	41
" abdominal	28	29	41	22	4	6	5	7
Dysentery	421	401	537	374	22	52	235	65
Dyspepsia	2	2	3	2	1	1	...	...
Gout	2	5	3	3	1	...	...	2
Icterus	17	17	15	24	5	9	6	4
Ileus	8	3	1	3	1	...	1	1
Inflammation of the liver	37	34	39	28	3	6	13	6
" peritoneum	62	60	70	62	18	24	14	6
" stomach and bowels	187	187	233	260	55	68	83	54
Intussusception	...	...	7	3	2	1	...	...
Marasmus	217	255	246	373	54	88	147	84
Obstruction of the bowels	8	8	8	9	2	2	3	2
Scrofula	57	48	68	56	20	12	16	8
Tabes mesenterica	25	45	45	37	9	8	14	6
Tuberculosis	16	18	33	18	5	2	3	8
Ulceration of stomach and bowels	19	16	21	16	1	2	7	6
Totals	2064	1917	2023	2086	298	393	1022	373
Total mortality, exclusive of stillborn	8025	8401	9655	9140				
Per cent. of total mortality	23.00	21.34	20.95	22.82				

The number of deaths from diseases of the urino-genital organs in the year 1853, was 171, as stated in the following table.

Puerperal fever caused the death of 26, of which number nearly one-half (12) occurred in the first quarter, or cold season. In

addition to these, 15 are reported to have died in "childbed," and 13 from uterine hemorrhage.

Mortality from Diseases of the Utero-Genital Organs.

	ANNUAL AGGREGATES.				QUARTERS OF 1853.			
	1850.	1851.	1852.	1853.	1st.	2d.	3d.	4th.
Abortion	...	1	1	...	...	...	...	...
Albuminuria	...	...	...	2	1	1	...	...
Amenorrhœa	...	...	...	1	...	...	1	...
Cancer of mammæ	7	11	11	26	9	8	2	7
" uterus	18	17	11	11	...	4	3	4
Childbed	4	7	1	15	3	6	4	2
Chlorosis	...	...	2	2	1	...	1	...
Convulsions, puerperal	8	9	16	9	1	1	2	5
Disease of the bladder	...	1	1	3	1	1	1	...
" kidneys	9	8	9	8	3	1	2	2
" ovaries	1	1	...	...	...	...	...	...
" prostate gland	...	1	1	...	...	...	...	...
" urinary organs	1	1	2	2	...	...	1	1
" uterus	...	1	2	4	1	1	2	...
Dropsy, ovarian	3	2	3	1	1	...	...	...
" of uterus	...	...	...	1	1	...	...	...
Enlargement of prostate	...	1	1	2	2	...	...	...
Fever, puerperal	30	41	43	26	12	5	8	1
Hemorrhage from uterus	11	12	10	13	4	2	5	2
Inflammation of the bladder	2	10	9	9	2	2	2	3
" kidneys	6	4	9	6	2	1	2	1
" prostate	...	2	...	...	...	...	...	...
" uterus	8	16	19	9	4	3	1	1
Mania, puerperal	...	1	6	5	1	2	2	...
Menorrhagia	...	...	1	...	...	...	...	...
Orchitis	...	...	1	...	...	...	...	...
Rupture of the bladder	...	1	...	...	...	...	...	...
" urethra	...	...	...	1	...	1	...	...
" uterus	2	...	1	4	1	...	2	1
Stone	...	...	2	1	...	1	...	...
Stricture of the urethra	...	1	...	3	...	2	...	1
Strangury	...	...	2	...	...	...	...	...
Syphilis	...	5	6	7	...	1	4	2
Tumor, ovarian	...	1	4	...	...	...	...	...
Ulceration of the bladder	...	2	...	...	...	...	...	...
" urethra	...	...	1	...	...	...	...	...
" uterus	...	1	1	...	...	...	...	...
Totals	110	158	176	171	50	48	45	38

Between the 19th of July and 7th of October, there were 170 cases of malignant or yellow fever, of which, according to the valuable reports of Dr. Jewell,* 128, or 75 per cent., died.

* See Quarterly Summary of the Transactions of the College of Physicians of Philadelphia, vol. i., New Series, pp. 54, 64, and 116.

According to the weekly returns published by the Board of Health, the aggregate of the deaths characterized as malignant, pernicious, typhus-icterodes, and yellow fever, was 94. This discrepancy is satisfactorily accounted for in the reports of Dr. Jewell, already referred to.

The total number of deaths from every species of fever named in the reports of the Board of Health for the year 1853, was 1,005, or at the rate of 10.99 per cent. of the total mortality.

The number of deaths from scarlet fever was 384, or at the rate of 4.20 per cent. The number of deaths from this disease during the past four years has been at an average rate of 4.37 per cent. of the whole mortality.

The mortality from fevers for the years 1850, 51, 52, and 53, is stated in the following table.

Mortality from Fevers.

	ANNUAL AGGREGATES.				QUARTERS OF 1853.			
	1850.	1851.	1852.	1853.	1st.	2d.	3d.	4th.
Fever	32	25	30	18	1	6	7	4
" bilious	15	2	8	47	6	4	26	12
" catarrhal	8	...	2	...	...	...	...	...
" cerebral	...	2	4	1	...	1	...	...
" congestive	17	10	15	9	2	...	8	4
" continued	8	2	...	3	...	3	...	...
" gastric	...	1	2	1	...	1	...	...
" hectic	5	4	6	8	4	2	1	1
" intermittent	15	7	5	12	...	2	6	4
" inflammatory	...	...	1	...	...	...	...	...
" malignant	...	...	...	52	...	...	38	14
" nervous	1	...	2	2	...	...	1	1
" pernicious	...	...	...	2	...	...	1	1
" puerperal	80	41	43	26	12	5	8	1
" remittent	85	87	86	45	2	10	16	17
" scarlet	489	400	419	384	216	80	32	56
" synocha	...	...	3	...	...	...	...	...
" typhoid	105	127	131	198	45	35	63	55
" typhus	69	88	154	156	50	45	30	30
" " abdominalis	...	...	...	2	...	...	2	...
" " icterodes	...	...	...	14	...	...	6	8
" yellow	...	...	...	26	...	...	17	9
Totals	769	746	861	1006	337	194	257	217
Total mortality, exclusive of stillborn	8025	8401	9655	9140				
Per cent. of total mortality	9.50	8.87	8.71	10.99				

The number of deaths from smallpox and from measles has

fallen very much below the mortality from those diseases in the three preceding years. The following table shows the number of deaths from smallpox, measles, and varioloid, in the past four years.

	ANNUAL AGGREGATES.				QUARTERS OF 1853.			
	1850.	1851.	1852.	1853.	1st.	2d.	3d.	4th.
Measles	69	16	90	12	5	5	1	1
Smallpox	40	216	426	57	24	24	8	1
Varioloid	1	8	11	...	...	...	...	...
Totals	110	240	527	69	29	29	9	2

The most fatal diseases of the past year are named in the following table.

Causes assigned for Death where the number is 90 and upwards.

	ANNUAL AGGREGATES.				QUARTERS OF 1853.			
	1850.	1851.	1852.	1853.	1st.	2d.	3d.	4th.
Apoplexy	97	....	91	112	29	24	33	26
Cholera infantum	506	397	330	395	5	34	333	23
Consumption of the lungs	907	881	1182	1246	343	317	287	299
Congestion of the brain	97	130	124	153	29	29	65	30
Convulsions	444	479	483	530	132	148	154	96
Croup	143	130	187	295	108	54	30	103
Debility	201	260	341	337	100	91	123	73
Diarrhœa	208	157	154	130	10	24	72	24
Disease of the brain	...	...	99	...	...	...	...	...
" heart	101	98	124	110	28	36	27	19
Dropsy	116	128	123	148	53	29	25	41
" of the brain	283	245	286	190	49	47	53	36
Dysentery	421	401	537	374	22	52	235	65
Effusion on the brain	...	...	98	...	...	...	...	...
Erysipelas	...	...	91	...	...	...	...	...
Fever, scarlet	439	400	419	384	216	80	82	56
" typhoid	105	127	131	198	45	35	68	55
" typhus	...	...	154	155	50	45	80	30
Inanition	...	106	91	...	...	...	...	...
Inflammation of the brain	218	262	254	156	47	42	41	26
" bronchi	191	175	207	195	66	37	27	65
" lungs	352	352	438	346	104	115	45	82
" stomach and bowels	187	187	233	260	55	68	83	54
Marasmus	217	256	346	373	54	88	147	84
Measles	...	...	90	...	...	...	...	...
Old age	185	186	189	185	42	30	29	34
Smallpox	...	216	426	...	...	...	...	...
Stillborn	453	470	500	571	159	153	136	123
Unknown	147	141	270	218	56	53	62	47

TABLE OF

Collated from returns to the Board of Health of Philadelphia,

FIRST QUARTER. Commencing

	Jan. 1.		Jan. 8.		Jan. 15.		Jan. 22.		Jan. 29.		Feb. 5.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Abscess	...	1	...	1	...	...	...	...	...	...	...	...
" of lungs	...	...	1	...	...	...	...	...	...	...	...	...
" neck	...	...	...	...	...	...	...	...	...	...	...	1
" spine	...	...	...	...	...	...	...	1	...	...	...	...
" thorax	...	...	1	...	...	...	...	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...
Albuminuria	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia	...	...	...	...	1	...	1	1	1	...	...	...
Angina pectoris	1	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	...	...	5	1	8	...	...	...	...	...	6	...
Aphthæ	...	...	...	...	...	...	...	...	...	...	...	...
Asphyxia	...	...	...	1	...	...	...	...	...	2	...	...
Asthma	...	...	...	...	...	...	...	...	2	...	...	...
Cancer and scirrhus	...	...	...	...	1	...	1	...	1	...	1	...
" of breast	1	...	...	...	...	...	1	...	1	...	...	...
" stomach and bowels	...	...	1	...	2	...	...	...	1	...	...	...
Caries of the spine	...	...	...	...	...	...	...	...	...	...	...	...
Casualties	2	1	1	...	2	1	1	2	2	...	2	...
" burns and scalds	...	1	...	2	1	1	...	...	...	2	...	1
" concussion of the brain	...	...	...	...	1	...	...	...	...	...	...	...
" drowned	...	...	2	...	1	...	...	...	...	...	...	1
" poisoning	...	...	1	...	...	...	...	...	...	...	...	...
" suicide	...	...	...	...	...	...	1	...	...	...	...	...
Childbed	...	...	1	...	...	...	1	...	...	...	1	...
Chlorosis	...	...	...	...	...	...	...	...	...	...	...	...
Cholera infantum	...	...	...	...	...	...	...	...	...	...	...	...
" morbus	1	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of the liver	...	...	...	...	...	...	...	...	...	...	1	...
Colic	...	...	...	...	...	...	...	...	...	...	...	...
Coma	...	...	...	...	1	...	...	...	...	...	...	...
Compression of the brain	...	...	1	...	...	...	1	...	...	...	...	...
Consumption of the bowels	...	...	1	...	...	...	...	...	...	...	1	...
" " lungs	13	6	30	2	20	4	28	6	30	4	19	3
" laryngeal	1	...	...	...	...	...	...	...	...	...	...	...
Congestion of the brain	...	...	...	3	2	...	1	3	1	1	...	...
" liver	...	...	...	...	...	...	...	...	...	...	...	...
" lungs	...	2	1	...	...	...	1	3	...	1	...	...
" throat	...	...	...	...	1	...	...	...	...	...	...	...
Convulsions	...	11	1	11	...	7	2	9	...	6	1	18
" puerperal	...	...	...	...	...	...	...	...	...	...	...	...
Cramp	...	...	...	...	...	...	...	1	...	...	...	...
Croup	...	7	...	10	...	8	...	4	...	7	...	8
Cyanosis	...	1	...	...	...	...	...	...	...	...	...	1
Debility	5	4	6	3	3	2	4	5	5	5	1	2
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	2	...	...	...	...	1	...	...	...	1	...	2
Disease of the bladder	...	...	...	...	...	...	...	...	...	...	...	...
" brain	...	2	...	...	...	1	1	4	...	4	...	1
" chest	...	...	...	...	...	...	...	...	...	...	...	...

MORTALITY,

for the year 1853, by W. S. W. RUSCHENBERGER, M. D.
December 25, 1852.

Feb. 12.		Feb. 19.		Feb. 26.		Mar. 5.		Mar. 12.		Mar. 19.		Mar. 26.		Total for the first quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	1	...	...	...	...	...	...	1	2	1	3
...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	4	1	5
1	...	...	...	...	2	...	...	...	...	...	...	...	...	2	2	4
4	...	...	1	2	...	4	...	...	...	1	...	2	...	27	2	29
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	1	...	...	2	...	1	...	4	...	2	...	2	1	14	15
1	...	...	...	...	...	...	...	...	...	...	...	1	...	4	...	4
...	...	...	...	...	...	1	...	...	...	2	...	2	...	9	...	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	1	...	1	...	...	...	...	...	...	...	...	...	6	...	6
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	2	1	3	1	...	...	...	...	4	3	...	1	19	10	29
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	9	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	1	...	1	...	...	...	5	1	6
...	...	...	...	...	...	...	...	1	...	1	...	...	...	3	...	3
...	...	1	...	...	...	...	...	...	...	...	...	1	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	1	...	...	...	3	...	...	...	...	...	...	...	1	...	5	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	1	3
23	4	18	3	26	6	28	...	19	7	20	5	14	5	288	55	343
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	1	...	2	2	2	...	2	...	...	1	2	1	3	10	19	29
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	3	...	...	...	2	2	...	5	11	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	11	...	7	1	9	1	8	...	10	1	7	...	15	8	124	132
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	1	...	...	...	...	1	...	...	...	...	1	2	3
...	12	...	10	...	14	...	9	...	5	...	9	...	5	...	108	108
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	3	3
3	3	1	6	4	6	4	2	4	2	6	2	5	7	51	49	100
2	...	...	...	...	...	...	...	...	...	...	1	...	...	2	1	3
2	...	...	...	1	...	...	...	...	...	...	1	...	...	5	5	10
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
1	...	...	...	...	2	...	...	...	1	1	1	...	1	8	17	20
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1

TABLE OF MORTALITY.—

	Jan. 1.		Jan. 8.		Jan. 15.		Jan. 22.		Jan. 29.		Feb. 5.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Disease of the heart	...	...	...	...	2	...	5	...	4	...	2	1
" hip	...	...	...	...	...	1	...	...	...	...	...	...
" kidneys	...	...	...	...	...	...	...	1	...	...	...	...
" liver	...	...	...	...	...	...	...	...	2	1	...	...
" lungs	...	...	...	...	...	...	...	...	...	...	...	...
" parotids	...	...	...	...	...	...	...	...	...	...	...	...
" skin	...	...	...	...	...	...	...	...	...	...	...	...
" spine	...	...	...	...	...	...	...	...	1	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	1	...	...	...
" throat	...	...	...	...	...	...	...	1	...	...	...	...
" uterus	...	...	...	...	1	...	...	...	...	...	...	...
Dropsy	2	1	2	...	2	8	1	1	1	4	2	...
" abdominal	1	...	...	...	...	...	1	...	...	...	...	...
" of the brain	...	1	...	4	...	2	...	2	...	8	...	5
" chest	1	...	...	...	...	...	...	...	1	...	...	...
" heart	...	...	...	...	...	...	...	...	...	...	...	...
" ovarian	...	...	...	...	...	...	...	...	...	...	...	...
" of the uterus	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	8	1	1	1	...	1	1	...	2	...	...
Dyspepsia	...	...	...	...	...	...	...	...	...	...	...	...
Effusion on the brain	...	1	1	8	1	8	1	2	...	2	...	1
" chest	...	...	...	...	...	...	...	...	...	...	...	1
" lungs	1	...	...	...	...	...	...	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	1
Enlargement of the heart	...	...	...	...	...	...	...	...	...	...	2	...
" prostate gland	...	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	...	...	...	1	...	...	...	...	...	...	...	...
Erysipelas	...	...	2	3	...	2	2	...	1	1	...	1
Fever	...	...	...	...	...	...	...	...	...	...	...	...
" bilious	...	...	...	...	1	1	...	...	...	...	1	1
" congestive	...	...	...	...	...	...	...	...	...	...	...	...
" hectic	...	...	...	...	...	...	...	1	...	...	...	...
" puerperal	1	...	...	...	...	...	...	...	2	...	3	...
" remittent	...	...	...	...	...	...	...	...	1	1	...	...
" scarlet	...	15	...	15	1	15	...	14	...	20	...	17
" typhoid	1	1	1	1	4	2	2	1	1	...	6	1
" typhus	6	...	5	1	2	2	1	...	9	...	1	...
Fracture of the leg	...	...	...	...	...	...	...	...	1	...	...	...
" skull	...	...	...	...	...	...	...	...	...	...	...	1
" spine	1	...	...	...	...	...	...	...	...	...	...	...
Gangrene	1	...	...	...	...	...	...	...	...	...	...	...
Gout	1	...	...	...	...	...	...	...	...	...	...	...
Hemorrhage	1	...	...	...	...	...	...	...	...	...	...	1
" from lungs	1	...	...	...	...	...	...	...	1	...	1	...
" stomach and bowels	...	...	...	1	...	...	...	...	1	...	...	...
" umbilicus	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	1	...	...	...	1	...	...	...	1	...
Hernia	1	...	...	...	...	...	...	...	...	...	...	...
Icterus	...	1	1	...	...	...	...	...	1	...	...	...
Ileus	...	...	...	...	1	...	...	...	...	...	...	...
Inanition	...	2	1	8	1	...	...	2	...	...	...	...
Inflammation	...	...	...	...	...	...	...	...	...	...	...	...
" of the bladder	...	...	...	...	...	...	1	...	...	...	1	...

FIRST QUARTER—*Continued.*

Feb. 12.		Feb. 19.		Feb. 26.		Mar. 5.		Mar. 12.		Mar. 19.		Mar. 26.		Total for the first quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	2	2	...	1	...	1	...	...	1	2	1	4	...	23	5	28
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	1	...	...	1	2	1	3
...	...	...	1	...	...	...	...	...	...	1	...	...	...	3	2	5
...	...	...	...	1	...	1	...	...	1	...	...	...	...	1	2	3
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	...	...	...	1	1	...	...	...	...	...	1	...	...	2	2	4
...	...	...	2	...	...	...	...	2	...	...	...	...	...	3	2	5
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	3	6	5	2	1	5	4	2	...	1	2	2	...	29	24	53
...	...	...	...	1	...	...	...	1	...	...	...	...	...	4	...	4
...	5	...	7	...	6	...	5	...	1	...	3	...	5	...	49	49
1	...	...	1	3	...	...	1	...	...	1	1	...	...	7	3	10
...	...	...	...	...	...	...	1	...	...	1	...	1	...	1	2	3
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	4	...	...	3	...	2	1	1	...	9	13	22
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	1	1	1	1	2	3	1	4	...	1	...	3	8	26	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	1	...	2	...	...	...	...	...	...	2	3	5
...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...	2
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	2
...	3	...	1	...	1	1	2	...	1	...	3	1	...	7	18	25
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	3	5
...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	2
...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	2
1	...	...	...	2	...	...	...	2	...	...	...	...	...	12	...	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	12	1	21	...	21	...	20	...	15	...	18	...	11	2	214	216
9	...	5	1	2	1	6	...	1	...	3	...	3	1	36	9	45
9	1	2	...	2	...	1	...	2	...	3	...	2	1	45	5	50
...	...	...	...	1	...	...	...	...	...	1	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	2	...	...	...	...	...	...	1	...	...	...	...	3	1	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
1	...	...	...	...	...	1	...	...	...	...	...	1	...	4	1	5
1	...	1	...	...	...	...	...	...	...	...	...	...	...	5	...	5
...	...	...	...	2	1	1	...	...	...	...	...	...	...	4	2	6
...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...	4	...	4
...	...	...	...	1	...	...	...	1	...	...	...	...	...	3	...	3
...	...	1	...	...	1	...	...	...	...	...	...	...	...	3	2	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	3	1	1	...	...	...	...	...	...	...	1	3	12	15
...	...	1	...	...	...	...	...	...	...	1	...	...	1	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2

TABLE OF MORTALITY.—

	Jan. 1.		Jan. 8.		Jan. 15.		Jan. 22.		Jan. 29		Feb. 5.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Inflammation of the brain	3	1	1	...	1	3	1	3	...	4	1	2
" bronchi	...	5	2	6	1	2	1	5	2	2	...	4
" chest	...	...	...	...	...	...	...	...	...	...	...	...
" head	...	...	...	...	...	1	...	...	...	...	...	...
" heart	...	1	...	...	1	...	...	...	...	...	...	...
" kidneys	...	...	...	...	...	...	...	...	...	...	...	...
" larynx	...	3	...	...	1	...	...	...	...	...	2	...
" liver	...	...	...	...	...	...	1	...	...	...	2	...
" lungs	3	3	3	4	3	7	4	5	3	3	1	5
" neck	...	1	...	...	...	...	...	...	...	...	...	...
" parotids	...	...	...	...	...	...	...	...	...	1	1	...
" peritoneum	...	...	...	...	1	...	1	1	2	...	...	...
" pleura	1	...	...	...	...	...	1	...	...	...	...	...
" spine	...	...	...	...	...	...	...	...	...	...	1	...
" stomach and bowels	3	1	1	2	4	1	2	1	5	3	...	5
" tonsils	...	...	...	...	...	...	...	...	...	...	...	1
" throat	...	...	...	...	...	1	...	...	...	...	...	...
" uterus	..	...	...	...	...	1	...	...	...	...	...	...
Influenza	...	...	...	...	...	...	1	...	...	...	...	...
Intemperance	1	...	...	...	1	...	2	...	...	...	...	...
Intussusception	...	...	...	...	...	1	...	...	...	...	...	...
Irritation of the spine	...	...	...	...	...	...	...	...	...	...	...	...
Malformation	...	...	...	1	...	...	...	...	...	...	...	...
" of the heart	...	...	...	...	...	...	...	...	...	...	...	...
Mania	...	...	...	...	...	...	...	...	1	...	...	...
Mania à potu	...	...	...	...	2	...	1	...	1	...	2	...
Mania, puerperal	...	...	...	...	...	...	...	...	...	...	...	...
Marasmus	...	3	...	2	...	3	...	3	1	2	...	3
Measles	...	...	...	2	...	...	...	...	...	1	...	...
Obstruction of the bowels	...	...	...	...	...	...	...	...	...	1	...	...
Old age	5	...	1	...	4	...	1	...	6	...	4	...
Ossification of the heart	...	...	...	...	...	...	...	...	1	...	...	...
Palsy	3	...	2	1	...	...	3	...	...	...	...	...
Perforation of stomach and bowels	...	...	...	...	1	...	...	...	...	...	...	...
Phlebitis	...	...	...	...	...	...	...	...	...	...	...	...
Phlegmasia dolens	...	...	...	...	...	...	...	...	...	...	...	...
Purpura	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism	...	...	...	...	...	1	...	...	...	...	...	...
Rupture of the uterus	...	...	...	...	...	...	...	...	...	...	1	...
Scrofula	...	2	1	2	...	1	...	2	...	2	...	1
Smallpox	...	...	...	1	...	...	1	...	...	1	...	4
Softening of the brain	...	...	...	...	1	...	...	...	1	...	1	...
Spina bifida	...	1	...	...	...	...	...	...	...	...	...	...
Stillborn	...	14	...	18	...	7	...	12	...	15	...	17
Stricture of the bowels	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation	...	1	1	...	...	...	...	...	...	1	1	...
Syncope	...	...	...	...	1	...	...	...	...	...	...	...
Tabes mesenterica	...	...	...	...	...	...	...	...	...	2	...	...
Teething	...	...	...	...	...	...	...	...	...	1	...	...
Tetanus	1	...	...	...	...	...	...	...	...	...	...	...
Trismus	...	...	...	...	...	...	...	2	...	...	...	...
Tuberculosis	...	2	1	...	...	...	...	...	...	...	...	...
Tumor	...	...	...	...	...	...	...	...	1	...	...	...

FIRST QUARTER—*Continued.*

Feb. 12.		Feb. 19.		Feb. 26.		Mar. 5.		Mar. 12.		Mar. 19.		Mar. 26.		Total for the first quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
3	5	...	3	...	2	...	6	...	2	2	2	...	2	12	35	47
...	4	...	4	...	4	...	2	2	4	...	4	3	9	11	55	66
...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	1	...	2	1	...	...	5	2	7
...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	1	...	1	...	1	...	...	3	6	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
1	3	1	6	2	2	3	10	1	5	3	6	4	8	32	72	104
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	2	3
2	...	...	...	1	...	1	...	1	...	7	1	...	...	16	2	18
...	...	...	...	...	...	...	...	1	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	1	2	3	4	...	3	...	...	3	2	2	1	5	28	27	55
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	2
1	...	...	...	...	...	...	...	1	...	...	...	1	...	3	1	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	1	...	...	...	5	...	5
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	...	...	2	...	3	...	...	...	...	...	...	...	...	...	5	5
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	1	...	1	...	2	...	1	...	1	...	...	...	18	...	18
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	9	1	5	...	4	1	4	...	4	...	4	1	4	4	50	54
...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	5	5
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2
6	...	3	...	2	...	1	...	5	...	1	...	3	...	42	...	42
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	...	...	...	3	...	...	...	1	...	2	...	1	...	17	1	18
...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	2
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	2
1	...	1	...	...	...	2	...	...	1	1	...	...	...	5	2	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	3	...	...	...	2	1	2	...	1	2	18	20
...	4	1	...	...	3	...	1	...	4	...	1	...	3	2	22	24
...	...	...	1	1	...	...	...	...	...	...	...	1	...	5	1	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	19	...	10	...	12	...	8	...	8	...	10	...	9	...	159	159
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	1	...	...	...	...	...	...	2	...	...	...	...	...	4	3	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	1	...	...	...	...	...	1	1	2	...	1	1	8	9
...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	4	4
...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	1	1	...	...	...	...	...	...	2	3	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

TABLE OF MORTALITY.—

	Jan. 1.		Jan. 8.		Jan. 15.		Jan. 22.		Jan. 29.		Feb. 5.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Tumor, abdominal	...	...	...	...	...	...	1	...	...	...	...	...
" uterine	...	...	...	...	...	...	...	...	...	...	...	...
Tympanitis	...	...	...	...	...	1	...	...	...	...	...	...
Ulceration	...	...	...	...	...	...	...	...	...	...	...	...
" of the stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...
" throat	...	...	...	1	...	...	...	...	...	...	...	...
Unknown	2	3	2	2	5	1	3	3	2	...	3	3
Whooping-cough	...	...	...	...	...	...	...	...	...	1	...	...
From the almshouse	9		18		29		10		16		11	
From the country	2		4		1		5		3		2	
People of color	19		16		11		18		12		13	
Under 1 year	...	56	...	50	...	35	...	50	...	44	...	51
From 1 to 2 years	...	12	...	16	...	21	...	14	...	23	...	15
" 2 " 5 "	...	15	...	28	...	15	...	20	...	24	...	28
" 5 " 10 "	...	11	...	7	...	5	...	8	...	13	...	12
" 10 " 15 "	...	3	...	2	...	2	...	5	...	3	...	2
" 15 " 20 "	...	1	...	7	...	10	...	5	...	5	...	6
" 20 " 30 "	17	...	18	...	22	...	19	...	19	...	22	...
" 30 " 40 "	8	...	27	...	15	...	23	...	21	...	9	...
" 40 " 50 "	12	...	9	...	16	...	12	...	20	...	16	...
" 50 " 60 "	10	...	10	...	15	...	9	...	9	...	11	...
" 60 " 70 "	8	...	9	...	4	...	13	...	11	...	8	...
" 70 " 80 "	4	...	3	...	4	...	4	...	13	...	3	...
" 80 " 90 "	7	...	4	...	6	...	3	...	5	...	3	...
" 90 " 100 "	1	...	1	...	...	...	1	...	...	...	2	...
" 100 and upwards	...	...	...	...	1	...	...	...	...	...	...	...
Totals	67	103	81	110	83	88	84	102	98	112	74	114
Weekly mortality	170		191		171		186		210		188	

First Quarter—*Continued.*

Feb. 12.		Feb. 19.		Feb. 26.		Mar. 5.		Mar. 12.		Mar. 19.		Mar. 26.		Total for the first quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	1	...	...	...	...	1	...	...	1	...	...	...	...	2	3	5
2	...	1	1	4	1	2	...	3	3	3	4	2	1	34	22	56
...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	3	3
17		10		16		8		15		15		17				191
3		1		1		...		2		2		3				29
20		9		14		9		12		14		20				187
...	58	...	48	...	65	...	32	...	41	...	43	...	54	...	627	
...	24	...	19	...	19	...	16	...	14	...	13	...	18	...	224	
...	31	...	28	...	25	...	35	...	24	...	36	...	17	...	326	
...	10	...	7	...	14	...	10	...	13	...	16	...	24	...	150	
...	...	...	5	...	4	...	2	...	6	...	2	...	...	...	41	
...	3	...	2	...	7	...	3	...	5	...	7	...	3	...	64	
21	...	9	...	21	...	21	...	15	...	24	...	18	...	246	...	
6	...	15	...	20	...	17	...	17	...	23	...	7	...	208	...	
10	...	8	...	16	...	8	...	13	...	10	...	8	...	158	...	
5	...	7	...	10	...	10	...	6	...	8	...	13	...	123	...	
11	...	5	...	6	...	12	...	9	...	8	...	12	...	116	...	
4	...	3	...	10	...	9	...	5	...	6	...	5	...	73	...	
3	...	1	...	1	...	2	...	2	...	5	...	2	...	44	...	
1	...	4	...	...	...	...	...	1	...	...	...	...	...	11	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
61	126	52	109	84	134	79	98	68	103	84	117	65	116	980	1432	2412
187		161		218		177		171		201		181				

TABLE OF

Collated from returns to the Board of Health of Philadelphia,

SECOND QUARTER. Commencing

	April 2.		April 9.		April 16.		April 23.		April 30		May 7.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Abscess	...	...	...	...	...	...	...	1	...	...	...	...
abdominal	1	...	...	...	...	...	...	...	...	...	...	...
of the brain	...	...	...	...	...	...	...	...	...	...	...	...
liver	...	...	...	...	...	...	...	...	1	...		...
lungs	...	...	...	...	...	...	...	...	1	1	...	...
neck	...	...	...	...	...	...	...	...	...	1	...	...
psoas	...	...	2	...	...	...	...	...	...	...	...	...
thorax	...	...	...	...	...	...	...	...	...	...	...	...
thymic	...	...	...	1	...	...	...	...	...	...	...	...
Albuminuria	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia	...	...	...	...	...	...	...	...	...	...	...	...
Angina pectoris	...	...	...	...	...	...	...	...	...	1	...	...
Aneurism	...	1	...	...	...	...	...	...	...	...	...	...
Anthrax	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	2	1	8	...	2	...	8	...	4	...	8	1
Asphyxia	...	1	...	...	...	...	...	...	...	...	...	1
Asthma	...	...	...	...	...	...	...	...	...	...	...	...
Cachexia	...	...	...	...	...	...	...	1	...	...	...	...
Cancer and scirrhus	1	...	1	...	1	1	...	...	...	...	1	...
" of the breast	...	...	...	...	1	...	...	...	...	...	...	...
" stomach and bowels	...	...	1	...	...	...	1	...	...	...	...	...
" pancreas	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	1	...	...	...	1	...
Cancrum oris	...	...	...	...	...	1	...	...	...	8	...	...
Caries	1	...	...	...	...	...	1	...	...	...	...	...
" of the spine	...	...	...	...	...	1	...	...	...	...	...	...
Casualties	1	2	...	1	1	...	...	1	2	...	...	2
" burns and scalds	...	...	1	1	...	1	...	...	...	1	1	2
" concussion of the brain	...	...	...	...	1	...	...	...	...	...	...	...
" drowned	1	...	1	...	...	1	1	...	...	...	1	...
" poisoning	1	...	...	2	...	...	...	...	...	...	...	...
" suicide	...	...	...	...	1	...	...	...	...	...	1	...
Childbed	1	...	...	...	1	...	...	...	1	...	1	...
Cholera infantum	...	...	...	...	...	1	...	1	...	1	...	1
" morbus	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of the liver	...	...	...	...	...	...	1	...	...	...	...	...
Compression of the brain	...	...	...	...	...	...	...	...	...	...	...	...
Consumption of the bowels	...	...	...	...	...	...	...	...	...	...	...	1
" lungs	23	5	26	3	25	11	21	8	17	4	22	4
Congestion of the brain	1	1	...	2	...	1	...	3	1	3	...	...
" lungs	1	...	...	1	...	1	1	1	...	...	...	...
" spinal marrow	...	...	...	...	1	...	...	...	...	...	...	...
Convulsions	...	12	1	19	1	10	...	7	1	18	1	9
" puerperal	...	...	...	...	1	...	...	...	...	...	...	...
Croup	...	8	...	3	...	7	...	5	...	8	...	7
Coup de soleil	...	...	...	...	...	...	...	...	...	...	...	...
Cyanosis	...	...	...	...	...	...	...	...	...	...	...	1
Debility	3	5	1	3	4	1	4	4	4	2	4	5
Diarrhœa	...	...	1	...	...	2	...	2	1	1	1	1

MORTALITY,

for the year 1853, by W. S. W. RUSCHENBERGER, M. D.
March 26, 1853.

May 14.		May 21.		May 28.		June 4.		June 11.		June 18.		June 25.		Total for the second quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	...	...	...	...	...	...	...	1	...	...	...	1	...	2	1	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	1	...	...	...	...	1	...	...	...	...	2	2	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1	2
...	2	...	...	...	1	...	...	1	...	...	...	...	...	4	1	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
1	...	1	...	1	...	...	...	...	...	1	...	1	...	22	2	24
...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	4	4
1	...	...	...	...	...	1	...	...	...	1	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	2
...	...	...	...	...	...	1	...	1	...	1	...	...	...	7	1	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	1	...	...	...	4	...	4
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	5	5
1	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	2
2	2	...	1	1	1	3	...	2	2	2	...	2	...	16	12	28
...	...	...	...	...	...	1	...	1	...	...	...	...	...	4	5	9
...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	2	3
3	1	1	...	...	...	...	...	1	...	1	3	3	1	13	6	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
1	...	...	...	...	...	...	...	...	...	...	...	1	...	4	...	4
1	...	...	...	1	...	...	...	...	...	...	...	...	...	6	...	6
...	1	...	...	...	2	...	3	...	5	...	3	...	16	...	34	34
...	...	...	...	1	...	1	...	...	...	...	...	...	2	2	2	4
...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
27	4	13	2	28	5	18	1	17	2	14	4	16	7	262	55	317
1	...	...	2	...	...	...	1	1	1	1	4	3	3	8	21	29
...	1	...	...	...	...	...	...	...	1	...	1	...	...	2	6	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	17	3	7	...	6	...	5	...	4	1	8	...	16	10	138	148
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	3	...	5	...	2	...	1	...	...	...	2	...	3	...	54	54
...	...	...	...	...	...	...	...	...	...	...	1	16	3	16	4	20
...	...	...	...	...	...	...	2	...	...	...	2	...	...	...	5	5
2	2	1	5	2	3	3	6	5	3	1	2	4	7	43	48	91
...	1	1	...	...	...	...	3	1	1	1	1	3	3	9	15	24

TABLE OF MORTALITY.—

	April 2.		April 9.		April 16.		April 23.		April 30.		May 7.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Disease of the bladder	...	...	...	...	...	...	...	...	...	...	...	...
" brain	1	2	1	...	...	1	1	1	2	...	...	...
" chest	...	...	...	...	...	...	...	...	...	...	...	...
" heart	...	1	5	1	...	2	4	...	3	1	1	...
" hip	...	...	...	...	...	...	...	...	...	...	...	1
" kidneys	1	...	...	...	...	...	...	...	...	...	...	...
" liver	1	...	...	...	...	...	1	...	...	...	1	...
" lungs	...	1	1	8	...	1	...	...	1	...	1	1
" spine	...	...	...	...	...	...	...	...	...	1	...	...
" stomach and bowels	...	...	...	...	1	...	...	...	...	...	...	1
" throat	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...
Dropsy	2	2	1	...	2	8	1	1	2	1	...	2
" abdominal	1	...	1	...	...	...	...	...	2	...	...	...
" of the brain	...	2	...	4	...	8	...	4	...	5	...	4
" chest	3	1	2	2	1	...	...	2	1	1	...	...
" heart	...	...	...	...	2	1	...	2	...	1	...	...
Dysentery	...	2	...	...	...	2	...	2	2	2	1	3
Dyspepsia	...	...	...	...	...	...	...	...	...	...	...	...
Effusion on the brain	2	...	...	2	...	1	...	1	...	1	...	1
" chest	...	...	...	...	...	...	...	...	...	...	...	1
" lungs	...	...	...	...	...	...	...	...	...	...	...	...
Empyema	...	...	...	...	1	...	...	...	...	...	...	...
Enlargement of the heart	...	...	1	...	...	...	...	...	...	...	...	...
" liver	...	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	...	...	...	...	...	...	2	1	...	...	...	...
Erysipelas	4	...	2	1	1	2	1	1	1	3	...	2
Fever	...	...	...	...	1	...	...	...	...	...	1	...
" bilious	...	1	...	...	...	...	...	...	...	...	...	...
" cerebral	...	...	...	...	...	...	...	...	...	...	...	...
" continued	...	...	...	...	...	...	2	...	...	...	...	...
" gastric	...	...	...	...	...	...	...	1	...	...	...	...
" hectic	...	...	1	...	...	...	1	...	...	...	...	...
" intermittent	...	...	1	...	...	...	...	...	...	...	...	...
" puerperal	1	...	...	...	1	...	...	...	...	...	...	...
" remittent	...	...	3	1	...	...	...	...	...	1	...	...
" scarlet	...	11	...	8	...	5	...	7	...	10	...	6
" typhoid	1	1	3	...	2	1	3	3	1	1	2	...
" typhus	...	1	2	1	3	...	4	1	4	1	6	1
Fistula	1	...	...	...	...	...	...	...	...	...	...	...
Fracture of the spine	...	...	...	...	...	...	...	...	...	...	...	...
Gangrene	...	...	...	...	...	...	...	...	...	1	...	...
Hemorrhage	...	...	1	2	...	...	...	...	...	...	...	2
" from the lungs	1	...	...	...	...	...	1	...	...	...	...	1
" uterus	...	...	...	...	...	...	...	...	1	...	...	...
Hernia	...	...	...	...	...	1	...	...	...	...	...	...
Icterus	2	...	...	...	...	1	...	...	...	1	...	...
Inanition	1	...	...	...	1	...	...	...	...	1	...	...
Inflammation	...	...	...	2	1	...	...	...	...	...	...	...
" of the bladder	...	...	...	...	...	...	...	...	...	...	...	...
" brain	...	4	...	...	...	2	...	1	1	2	...	5
" bronchi	...	6	1	...	1	1	...	5	1	2	2	1
" chest	...	1	...	...	...	...	...	1	...	...	...	...

SECOND QUARTER—*Continued.*

May 14.		May 21.		May 28.		June 4.		June 11.		June 18.		June 25.		Total for the second quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	1	...	...	1	2	...	1	1	...	...	...	...	2	7	10	17
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
2	...	1	...	2	1	2	2	1	...	3	2	...	2	24	12	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	3	1	4
...	...	...	...	...	...	...	...	...	...	1	...	...	1	4	7	11
...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	3	3
2	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	3	1	1	1	...	1	...	2	...	...	...	...	1	15	14	29
1	...	...	...	...	...	...	...	1	...	...	...	...	...	6	...	6
...	3	...	3	...	5	1	5	...	3	...	2	...	3	1	46	47
...	1	...	...	...	...	...	...	...	...	...	...	...	...	7	7	14
...	...	2	...	...	1	...	...	...	...	...	...	...	...	4	3	7
2	2	...	...	...	...	1	1	...	7	2	3	4	16	12	40	52
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	1	1	1	...	2	1	...	...	...	1	6	9	15
...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	2	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	1	...	...	1	...	...	...	...	...	...	...	3	2	5
...	3	1	...	1	...	1	...	...	1	2	1	...	1	14	15	29
1	...	...	1	1	...	1	...	...	...	...	...	...	...	5	1	6
...	...	...	1	...	...	...	...	...	...	...	...	1	1	1	3	4
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2
...	...	1	...	1	...	...	...	1	...	...	...	...	...	5	...	5
1	...	1	...	...	1	...	1	...	...	...	...	1	...	6	4	10
...	7	...	7	...	4	...	2	...	9	...	...	...	4	...	80	80
1	...	1	...	2	1	3	...	5	...	...	2	2	...	26	9	35
3	...	2	...	3	...	2	...	1	1	2	...	7	...	39	6	45
...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	3	3
...	...	...	1	...	...	...	...	...	...	1	...	...	...	2	5	7
...	...	...	...	1	...	...	...	1	...	...	...	...	...	4	1	5
...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	1	...	...	...	...	1	1	...	...	...	...	...	1	4	5	9
...	...	...	...	...	...	...	...	...	...	...	2	1	3	3	6	9
...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	3	4
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	2
...	3	...	3	...	5	1	2	...	3	...	3	1	6	3	39	42
1	...	1	2	2	2	1	...	1	2	...	2	1	2	12	25	37
...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	4	4

TABLE OF MORTALITY.—

	April 2.		April 8.		April 16.		April 23.		April 30.		May 7.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult	Minor.	Adult.	Minor.
Inflammation of the head	...	...	...	...	...	1	...	...	...	...	...	...
" heart	...	...	...	...	...	...	1	...	...	...	1	...
" kidneys	...	...	...	...	...	...	...	...	...	...	...	1
" knee	...	...	...	...	...	...	...	...	...	...	...	...
" larynx	...	3	...	...	...	...	...	1	...	...	...	...
" liver	...	...	1	...	1	...	...	...	1	2	...	...
" lungs	6	9	6	5	4	6	7	10	7	7	3	2
" peritoneum	1	1	...	1	2	...	...	1	2	3	1	...
" pleura	1	...	...	...	2	...	...	...	...	...	1	...
" spine	...	...	...	...	...	...	...	1	...	...	...	...
" stomach and bowels	1	4	2	...	2	1	2	3	...	4	2	3
" tonsils	...	...	...	...	...	...	...	...	...	...	...	...
" throat	1	...	...	...	...	...	...	1	...	...	...	...
" uterus	...	...	1	...	...	...	...	...	...	...	2	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	1
Intemperance	3	...	...	...	...	...	...	...	3	...	3	...
Intussusception	...	...	...	...	...	1	...	...	...	...	...	...
Irritation of the spine	...	...	...	...	...	1	...	...	...	...	...	...
Ischuria	...	...	...	...	...	...	...	...	...	...	1	...
Malformation	...	1	...	...	...	...	...	...	...	...	...	...
Mania à potu	1	...	1	...	...	...	3	...	1	...	2	...
Mania, puerperal	...	...	...	...	...	...	...	...	...	...	1	...
Marasmus	1	3	1	6	...	4	1	9	...	5	...	4
Measles	...	1	...	2	...	...	...	...	...	...	...	...
Melæna	...	...	...	...	...	1	...	...	...	...	...	...
Necrosis	...	1	...	...	...	...	...	...	...	...	...	...
Neuralgia	...	...	1	...	...	...	...	...	...	...	1	...
Obstruction of the bowels	...	...	1	...	1	...	...	...	...	...	...	...
Old age	2	...	6	...	3	...	1	...	4	...	...	...
Ossification of the heart	...	...	...	...	...	...	...	...	...	...	...	...
Palsy	1	...	3	...	3	...	1	1	1	...	...	...
Perforation of stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...
Purpura	1	...	...	...	...	...	...	1	...	...	...	...
Rheumatism	1	...	...	...	...	...	...	...	...	...	...	...
Rupture of the urethra	...	...	...	...	...	...	...	...	...	...	...	...
Scrofula	...	1	...	...	...	...	...	1	...	3	1	...
Smallpox	...	5	...	2	...	...	...	1	...	5	1	1
Softening of the brain	...	...	1	...	...	...	...	...	1	...	...	...
Spina bifida	...	...	...	...	...	...	...	...	...	...	...	...
Stillborn	...	16	...	9	...	12	...	11	...	18	...	4
Stone	...	...	...	...	1	...	...	...	...	...	...	...
Stricture of the urethra	1	...	...	...	...	...	...	...	...	...	...	...
" bowels	...	1	...	...	...	...	...	...	...	...	...	...
Suffocation	1	...	...	...	...	...	1	...	...	...	...	...
Syphilis	...	...	...	...	...	...	...	...	...	...	...	...
Tabes mesenterica	...	...	...	2	...	1	...	1	...	...	...	1
Teething	...	1	...	...	...	1	...	1	...	1	...	...
Tetanus	...	...	...	...	...	...	...	...	1	...	1	...
Trismus	...	...	...	...	...	...	...	...	...	1	...	...
Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...
Tumor	...	...	...	...	...	...	...	1	...	...	...	...
" on the brain	...	...	...	...	...	...	...	...	...	1	...	...
Ulceration	...	...	...	...	...	...	1	...	...	...	...	...

SECOND QUARTER—*Continued.*

May 14.		May 21.		May 28.		June 4.		June 11.		June 18.		June 25		Total for the second quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	...	1	...	1	...	...	...	...	...	4	1	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	1	...	...	...	...	1	...	...	...	...	1	6	1	7
1	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2	6
6	7	2	2	...	1	4	3	4	5	2	2	3	2	54	61	115
1	...	...	...	...	1	1	...	1	...	4	...	4	...	17	7	24
...	...	...	...	...	...	...	...	...	...	...	...	1	...	5	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	1	2	2	3	6	3	4	2	1	1	7	2	9	23	45	68
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	...	...	...	...	...	...	...	1	...	...	...	...	...	11	...	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	2	...	...	...	...	...	...	...	...	...	4	4
...	...	1	...	2	...	...	...	1	...	1	...	4	...	17	...	17
...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	2
...	5	1	4	1	9	...	4	...	9	...	7	...	9	5	83	88
...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	5	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
4	...	2	...	...	...	...	...	1	...	3	...	4	...	30	...	30
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	2	...	1	...	...	...	...	...	...	...	1	...	14	1	15
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	1	...	...	...	1	...	2	...	...	1	...	...	1	2	10	12
...	1	1	1	...	2	...	...	...	...	1	...	...	3	3	21	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	2	2
...	17	...	4	...	8	...	16	...	13	...	18	...	7	...	153	153
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	8	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	1	2
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2

TABLE OF MORTALITY.—

	April 2.		April 9.		April 16.		April 23.		April 30.		May 7.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Ulceration of the larynx	...	...	...	...	...	...	...	...	...	...	...	1
" neck	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	...	...	1	...
" throat	...	...	1	...	...	1	...	...	...	...	...	...
Unknown	8	2	...	1	1	...	1	3	3	...	3	2
Whooping-cough	...	...	...	1	...	1	...	1	...	...	...	1
From the almshouse	18		15		21		14		15		15	
From the country	4		2		4		1		...		1	
People of color	18		20		14		14		19		18	
Under 1 year	...	60	...	38	...	44	...	49	...	55	...	37
From 1 to 2 years	...	15	...	15	...	12	...	22	...	17	...	12
" 2 " 5 "	...	27	...	23	...	21	...	24	...	28	...	23
" 5 " 10 "	...	8	...	7	...	7	...	6	...	14	...	9
" 10 " 15 "	...	5	...	2	...	7	...	5	...	6	...	4
" 15 " 20 "	...	10	...	8	...	7	...	5	...	10	...	4
" 20 " 30 "	22	...	29	...	17	...	14	...	14	...	18	...
" 30 " 40 "	25	...	18	...	19	...	24	...	19	...	16	...
" 40 " 50 "	9	...	15	...	11	...	16	...	12	...	11	...
" 50 " 60 "	10	...	9	...	14	...	8	...	18	...	10	...
" 60 " 70 "	9	...	6	...	8	...	7	...	11	...	11	...
" 70 " 80 "	10	...	6	...	5	...	2	...	5	...	11	...
" 80 " 90 "	3	...	5	...	4	...	3	...	5	...	...	...
" 90 " 100 "	...	...	2	...	...	...	...	...	...	...	...	...
Totals	89	125	90	93	78	98	74	111	79	130	77	89
Weekly mortality	125		183		176		185		209		166	

SECOND QUARTER—*Continued.*

May 14.		May 21.		May 28.		June 4.		June 11.		June 18		June 25.		Total for the second quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
2	3	1	1	1	1	1	...	3	1	4	...	8	3	36	17	53
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	5	5
13		6		13		9		15		7		13				174
2		1		1		...		3		...		4				23
15		14		8		14		15		8		16				193
...	44	...	27	...	42	...	46	...	37	...	50	...	81		610	
...	16	...	6	...	13	...	11	...	14	...	11	...	24		188	
...	21	...	15	...	14	...	10	...	20	...	12	...	24		262	
...	7	...	6	...	2	...	2	...	10	...	4	...	10		92	
...	3	...	4	...	1	...	1	...	2	...	3	...	6		49	
...	9	..	6	...	5	...	2	...	3	...	5	...	3		77	
18	...	11	...	16	...	23	...	15	...	14	...	32	...	243		
15	...	8	...	19	...	13	...	15	...	11	...	21	...	223		
21	...	9	...	11	...	5	...	7	...	9	...	16	...	152		
3	...	6	...	7	...	10	...	15	...	8	...	8	...	122		
11	...	7	...	6	...	3	...	10	...	10	...	9	...	108		
8	...	3	...	1	...	7	...	4	...	2	...	9	...	73		
3	...	3	...	1	...	1	...	1	...	3	...	8	...	40		
1	...	2	...	...	...	1	..	...	...	...	...	...	...	6		
80	100	49	64	61	77	63	72	67	86	57	85	108	148	967	1278	
180		113		138		135		153		142		251				2245

TABLE OF

Collated from returns to the Board of Health of Philadelphia,

THIRD QUARTER. Commencing

	July 2.		July 9.		July 16.		July 23.		July 30.		Aug. 6.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Abscess	...	1	...	...	1	...	...	3	...	...	...	...
" of the brain	...	...	...	1	...	...	...	...	...	...	...	...
" psoas	...	...	...	...	...	...	...	...	...	...	...	...
Amenorrhœa	...	...	...	...	...	...	...	...	...	...	...	1
Aneurism of the aorta	...	...	...	...	...	...	...	...	1	...	...	...
Apoplexy	1	1	3	...	1	...	3	...	1	...	3	...
Asphyxia	...	1	...	...	...	...	...	1	...	...	...	1
Asthma	...	...	...	...	...	...	...	...	...	...	1	...
Cachexia	...	...	...	...	...	...	...	1	...	...	...	1
Cancer and scirrhus	...	...	...	...	1	...	...	...	...	...	...	...
" of the breast	...	...	...	...	1	...	...	...	1	...	...	...
" stomach and bowels	1	...	...	...	...	...	...	...	...	...	1	...
" uterus	...	...	...	...	...	...	2	...	...	...	...	1
Cancrum oris	...	...	...	...	...	1	...	...	...	...	...	...
Caries of the spine	...	...	...	...	...	...	...	...	...	...	...	...
Casualties	2	2	1	1	...	...	...	2	...	...	3	...
" burns and scalds	...	...	...	...	...	...	1	...	...	...	...	...
" concussion of the brain	...	...	...	...	1	...	...	...	...	...	...	...
" drowned	2	1	4	4	...	1	3	2	3	2	6	2
" poisoning	...	...	...	...	...	...	...	1	...	1	...	...
" suicide	1	...	2	...	1	...	...	...	...	...	1	1
Childbed	...	...	...	...	...	...	...	...	...	...	...	...
Chlorosis	...	...	1	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	1	...
" infantum	...	29	...	39	...	21	...	29	...	31	...	23
" morbus	...	...	...	...	1	...	2	...	2	2	...	...
Cirrhosis of the liver	...	...	1	...	...	...	...	...	...	...	1	...
Colic	...	...	...	...	...	...	...	1	...	...	...	...
Compression of the brain	...	...	1	...	...	...	...	...	...	...	...	...
Consumption of the bowels	...	...	...	...	...	...	1	...	1	1	...	...
" " lungs	19	4	12	2	18	8	11	3	24	3	15	10
Congestion of the brain	2	4	2	1	3	3	1	4	1	6	1	5
" liver	...	...	...	...	...	...	...	1	...	...	...	...
" lungs	2	...	...	1	...	1	2	1	2	...	...	...
Convulsions	...	6	...	16	1	12	...	12	1	9	1	12
" puerperal	...	...	...	...	...	...	...	...	...	...	...	...
Cramp	...	1	...	...	...	...	...	...	...	...	...	...
Croup	...	3	...	2	...	3	...	3	...	2	...	5
Coup de soliel	3	1	...	...	...	...	...	...	...	...	...	...
Cyanosis	...	...	...	1	...	2	...	2	...	1	...	...
Debility	3	4	5	5	3	5	6	3	4	1	4	4
Dementia	...	...	...	...	...	...	...	...	...	...	...	...
Diabetes	...	...	...	...	1	...	...	...	...	...	...	...
Diarrhœa	2	3	1	10	1	5	1	5	1	6	2	3
Disease of the abdomen	...	...	...	...	...	...	...	...	...	...	...	...
" bladder	...	...	...	...	...	...	...	...	...	...	...	...
" brain	...	...	...	2	...	...	1	3	1	4	...	...
" chest	...	...	...	...	...	...	...	...	...	...	...	...
" heart	1	...	3	...	1	...	...	1	1	...	...	...

MORTALITY,

for the year 1853, by W. S. W. RUSCHENBERGER, M. D.
June 25, 1853.

Aug. 13.		Aug. 20.		Aug. 27.		Sept. 3.		Sept. 10.		Sept. 17.		Sept. 24.		Total for the first quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	1	...	...	1	...	1	...	...	...	...	...	1	...	4	5	9
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	a	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	2
...	...	7	...	1	...	2	...	2	...	4	...	4	...	82	1	83
...	1	...	1	...	2	...	...	...	1	...	2	...	...	...	10	10
...	...	1	...	...	...	...	...	...	...	1	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	1	...	...	...	1	...	4	...	4
1	...	...	...	...	...	...	...	1	...	...	...	...	...	4	...	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	3
...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	3	3
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	2	1	2	1	3	1	2	3	...	1	...	...	...	13	14	27
...	...	...	1	...	1	...	...	...	...	...	1	1	1	2	4	6
...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
3	1	2	...	1	1	5	...	1	...	...	...	2	...	32	14	46
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	3	3
...	...	...	...	...	...	...	...	1	...	...	...	...	...	6	1	7
1	...	1	...	...	...	...	...	1	...	1	...	...	...	4	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	43	...	43	...	23	...	21	...	14	...	10	...	7	...	333	333
1	...	...	1	...	...	1	...	2	...	...	...	...	...	9	3	12
...	...	...	...	...	...	1	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	2
2	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	1	...	1	...	1	...	...	...	...	...	...	...	5	1	6
19	4	12	1	16	4	15	3	21	8	24	4	21	6	227	60	287
...	...	10	6	1	2	...	...	1	4	4	1	1	2	27	38	65
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	1	...	...	...	...	...	...	...	1	...	...	...	3	3	11
...	15	1	9	...	11	...	13	...	16	...	9	...	10	4	150	154
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	3	...	...	...	3	...	...	...	2	...	2	...	2	...	30	30
4	...	25	...	...	...	...	...	2	...	1	...	...	...	35	1	36
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	7	7
6	4	6	8	6	2	2	5	5	7	7	1	2	5	64	59	123
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	4	3	7	1	3	...	3	2	1	...	...	2	4	18	54	72
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	2	...	2	...	2	2	...	...	1	...	3	...	1	4	20	24
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
4	...	3	...	4	...	2	...	1	1	2	...	1	2	28	4	27

TABLE OF MORTALITY.—

	July 2.		July 9.		July 16.		July 23.		July 30.		Aug. 6.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Disease of the hip	...	...	...	...	...	...	...	...	...	...	1	...
" kidneys	...	...	...	...	...	...	...	...	...	...	1	...
" liver	...	...	...	...	...	...	2	...	...	...	...	...
" lungs	...	...	...	...	...	...	...	1	...	...	1	1
" mesenteric glands	...	...	...	...	...	...	...	...	...	...	...	...
" spine	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	...	...	1	1	...	1	...	...	...
" urinary organs	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...
Dropsy	1	...	1	2	3	...	...	1	1	1	4	...
" abdominal	1	...	1	...	1	...	...	...	...	...	...	...
" of the brain	...	4	...	6	...	5	...	2	...	6	...	7
" chest	...	...	...	...	...	...	1	...	2	...	1	...
Dysentery	3	9	4	12	6	15	7	9	18	28	10	19
Effusion on the brain	...	1	1	3	...	3	1	1	1	1	...	2
" chest	...	...	...	...	...	...	...	...	...	...	...	...
Enlargement of the heart	1	2	1	...	...	1	...	...	1	...	1	...
" liver	...	...	...	...	1	...	...	...	1	...	...	...
Epilepsy	...	1	...	...	...	...	...	1	...	...	...	...
Erysipelas	1	...	2	...	...	...	...	...	2	...	...	...
Fever	...	...	...	...	1	...	...	1	...	...	...	...
" bilious	...	1	...	...	...	...	...	1	3	...	3	...
" congestive	...	...	...	...	...	...	...	1	...	...	...	...
" hectic	...	...	...	...	...	...	...	...	...	...	...	...
" intermittent	...	1	...	...	...	1	...	...	...	1	...	...
" malignant	...	...	...	...	...	...	...	...	1	...	3	1
" nervous	...	...	...	...	...	...	...	...	...	...	...	...
" pernicious	...	...	...	...	...	...	...	...	...	...	...	...
" puerperal	...	...	1	...	1	...	...	...	1	...	1	...
" remittent	1	1	...	1	...	...	1	...	...	1	...	2
" scarlet	...	6	...	4	...	...	...	3	...	3	...	4
" typhoid	4	3	...	...	5	...	2	...	5	1	4	2
" typhus	4	1	1	1	3	..	...	...	...	...	4	...
" " abdominalis	...	...	...	...	...	...	...	...	...	...	...	...
" " icterodes	...	...	...	...	...	...	...	...	...	...	2	...
" yellow	...	...	...	...	...	...	...	...	...	...	2	...
Fracture	1	...	...	...	...	...	...	...	...	...	...	...
" of the leg	...	...	...	...	...	1	...	...	...	...	...	...
" pelvis	...	...	...	...	1	...	...	...	...	...	...	...
" skull	...	...	...	...	...	...	...	...	...	...	...	...
" spine	...	...	...	1	...	...	...	...	...	...	...	...
Gangrene	...	...	...	...	...	...	...	...	1	1	...	...
Hemorrhage	1	...	...	...	...	...	...	...	...	1	...	...
" from lungs	...	...	...	...	1	...	...	...	...	...	1	...
" stomach and bowels	...	...	...	...	...	...	...	...	...	...	1	...
" uterus	1	...	...	...	...	...	1	...	...	...	1	...
Hernia	...	...	...	...	...	1	...	...	...	...	...	...
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...
Icterus	...	...	...	...	...	...	...	...	...	...	...	...
Ileus	...	...	...	...	...	...	...	...	...	...	...	...
Inanition	...	...	...	2	...	1	1	4	...	4	2	1
Inflammation	...	...	...	...	...	...	...	...	...	...	...	...
" of the bladder	...	...	1	...	1	...	...	...	...	...	...	...

THIRD QUARTER.—*Continued.*

Aug. 13.		Aug. 20.		Aug. 27.		Sept. 3.		Sept. 10.		Sept. 17.		Sept. 24.		Total for the third quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
1	...	...	...	1	...	...	...	...	...	...	...	...	...	4	...	4
...	...	...	1	...	...	...	...	...	...	...	...	1	...	2	3	5
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	1	4
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	1	...	...	...	2	...	2
...	1	5	...	3	...	2	...	2	1	5	1	1	...	28	7	35
...	...	...	...	1	...	1	...	...	...	...	...	...	...	5	...	5
...	4	1	7	...	3	1	3	...	6	...	1	...	2	2	56	58
1	...	1	...	...	...	...	...	...	1	2	...	...	1	8	2	10
13	6	7	9	7	12	10	6	3	6	5	10	4	7	92	143	235
2	1	...	...	...	2	1	2	...	2	...	...	...	...	6	18	24
...	...	...	...	1	...	...	...	1	...	...	...	...	...	2	...	2
...	...	1	...	...	...	...	...	...	2	...	...	...	...	5	5	10
...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	1	3
...	1	...	...	...	1	1	...	...	1	...	...	...	...	1	5	6
1	1	...	...	1	...	...	...	...	...	1	...	...	...	3	...	3
...	1	2	1	...	...	...	...	...	...	...	1	...	...	3	4	7
2	...	1	...	3	...	2	...	5	...	5	...	...	...	24	2	26
...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	1	3
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	2	...	...	...	3	3	6
...	1	3	1	7	...	6	...	3	1	6	...	5	...	34	4	38
...	...	...	...	...	...	...	...	...	...	...	..	...	1	...	1	1
...	...	1	...	...	...	...	...	...	...	...	..	...	...	1	...	1
...	...	2	...	...	...	...	...	1	...	1	...	...	...	3	...	3
...	...	1	...	...	...	1	2	1	1	...	1	...	2	5	11	16
...	1	...	6	...	1	...	1	...	1	...	1	...	1	...	32	32
6	1	5	2	5	2	3	...	...	2	3	2	3	3	45	18	63
1	1	...	...	3	...	2	1	1	1	2	...	1	3	22	8	30
1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	1	1	1	...	...	1	...	4	2	6
...	...	...	...	4	...	...	...	...	...	1	1	3	1	15	2	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	1	...	...	...	...	...	...	1	...	...	...	2	2	4
...	...	...	...	1	...	2	...	...	...	...	...	1	...	5	1	6
...	...	...	...	...	...	1	...	1	...	2	...	...	...	5	...	5
...	...	...	...	...	...	1	...	1	...	...	...	...	...	5	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	1	2	1	...	...	...	2	...	...	...	4	2	6
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	2	...	...	...	...	...	1	...	2	1	...	...	3	4	19	23
...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2

TABLE OF MORTALITY.—

	July 2.		July 9.		July 16.		July 23.		July 30.		Aug. 6.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Inflammation of the brain	...	2	...	1	...	4	...	8	1	...	...	2
" bronchi	1	...	1	1	...	1	...	...	...	8	...	1
" chest	...	...	...	...	...	...	...	...	...	...	...	...
" heart	...	...	1	...	...	...	...	...	...	...	...	...
" kidneys	...	...	...	...	...	...	...	1	...	...	...	...
" liver	1	...	1	...	...	...	...	...	...	...	1	...
" lungs	2	1	1	4	...	1	3	1	1	1	...	6
" peritoneum	...	1	...	...	1	1	1	1	2	...	1	...
" pleura	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	1	1	...	4	2	6	4	4	4	6	1	9
" uterus	...	...	...	...	...	...	...	...	...	...	...	...
Intemperance	...	...	...	...	2	...	1	...	1	...	3	...
Malformation	...	1	...	...	...	...	...	...	...	...	...	...
" of the heart	...	...	...	1	...	...	...	...	...	...	...	...
Mania	...	...	...	...	...	...	...	...	1	...	...	...
Mania à potu	3	1	...	...	4	...	2	...	2	...	...	...
Mania, puerperal	...	...	...	...	...	...	...	...	...	...	...	...
Marasmus	...	12	...	10	...	8	...	8	1	19	1	5
Measles	...	...	...	...	...	...	...	...	...	1	...	...
Melæna	1	...	...	...	...	...	...	...	...	...	...	...
Neuralgia	...	...	1	...	...	1	1	...	...	...	...	...
Obstruction of the bowels	...	...	...	...	...	...	...	1	...	...	...	...
Old age	1	...	4	...	1	...	4	...	2	...	4	...
Ossification of the heart	...	...	...	...	...	...	...	...	...	...	...	...
Palsy	...	...	2	...	...	...	1	...	2	...	2	...
Perforation of stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...
Phlegmasia dolens	...	...	...	...	1	...	...	...	...	...	...	...
Purpura	...	...	...	...	...	1	...	1	...	1	...	...
Rheumatism	...	...	...	...	...	...	...	...	1	...	...	...
Rupture of the uterus	...	...	1	...	...	...	...	...	...	...	...	...
Scrofula	...	1	...	1	1	...	1	1	1	...	1	...
Smallpox	...	1	...	1	...	...	...	...	...	...	...	1
Softening of the brain	...	...	...	...	...	...	...	...	...	...	...	...
Stillborn	...	18	...	15	...	18	...	7	...	9	...	8
Suffocation	...	...	...	...	...	...	...	...	...	...	...	...
Syncope	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis	...	...	...	...	...	...	...	...	...	...	...	...
Tabes mesenterica	...	...	...	1	...	1	...	...	...	2	...	1
Teething	...	2	...	...	...	...	...	2	...	...	...	...
Tetanus	...	...	...	..	...	...	...	...	1	...	...	...
Trismus	...	...	...	...	1	...	...	...	...	...	...	...
Tuberculosis	...	...	...	...	...	...	1	1	...	...	1	...
Tumor, abdominal	...	...	1	...	...	...	...	...	...	...	1	...
Ulceration of the larynx	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	1	...	...	2	1	1	...	...	...
" throat	...	...	...	...	...	...	...	2	...	2	...	...
Unknown	2	1	2	5	2	2	2	...	2	4	8	1
Whooping-cough	...	2	...	1	...	1	...	2	...	5	...	2
Wounds, gunshot	...	...	...	...	...	...	...	...	...	...	...	...
From the almshouse	18		14		12		18		18		17	
From the country	1		3		3		1		6		3	
People of color	15		19		7		16		17		14	

THIRD QUARTER—*Continued.*

Aug. 13.		Aug. 20.		Aug. 27.		Sept. 3.		Sept. 10.		Sept. 17.		Sept. 24.		Total for the third quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
1	1	1	5	1	3	1	5	...	3	...	1	1	5	6	35	41
...	5	2	2	1	1	1	1	1	2	1	1	...	1	8	19	27
...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	2
1	1	1	...	2	1	3	...	...	...	...	...	1	...	11	2	18
5	3	1	1	2	...	...	1	...	3	1	3	1	3	17	28	45
...	1	1	...	1	1	...	...	1	...	...	...	...	...	9	5	14
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
2	3	...	3	5	5	3	4	2	...	...	3	4	5	28	55	83
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	7	...	1	...	...	...	2	...	...	...	1	...	18	...	18
...	...	...	...	...	2	...	...	...	...	...	1	...	...	...	4	4
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
4	...	6	...	2	...	2	...	2	...	1	...	...	...	28	1	29
1	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
...	14	1	7	...	17	...	8	...	11	...	14	...	11	3	144	147
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	1	...	...	2	1	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
1	...	...	...	...	...	...	...	...	...	1	...	...	...	2	1	3
4	...	...	...	...	...	1	...	3	...	2	...	3	...	29	...	29
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
1	...	...	...	1	...	2	...	3	...	1	...	2	...	17	...	17
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	1	...	...	1	1	...	...	1	5	2	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	2
...	...	1	1	...	1	...	1	...	1	1	2	1	...	7	9	16
...	3	...	...	...	1	...	1	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
...	9	...	12	...	10	...	3	...	3	...	11	...	13	...	136	136
...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	2	2
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	1	...	...	...	...	...	...	...	...	...	...	...	2	1	3	4
...	1	...	4	...	...	...	1	...	2	...	...	...	1	...	14	14
...	1	...	1	...	...	...	...	...	...	...	1	...	1	...	3	3
...	1	1	...	...	...	1	...	...	...	...	...	...	...	3	1	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	...	...	...	1	...	...	...	...	1	...	4	3	7
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	5	5
...	2	4	3	1	3	3	4	3	2	...	3	3	...	32	30	62
...	3	...	1	...	2	...	3	...	3	...	5	...	3	...	33	33
...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	2
25		17		16		18		17		16		22				183
5		3		6		...		1		1		1				34
16		14		9		13		14		19		11				184

TABLE OF MORTALITY.—

	July 2.		July 9.		July 16.		July 23.		July 30.		Aug. 6.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Under 1 year	...	82	...	100	...	80	...	79	...	95	...	67
From 1 to 2 years	...	16	...	29	...	17	...	28	...	34	...	32
" 2 " 5 "	...	12	...	18	...	16	...	20	...	20	...	28
" 5 " 10 "	...	4	...	9	...	6	...	7	...	6	...	6
" 10 " 15 "	...	5	...	6	...	5	...	1	...	2	...	6
" 15 " 20 "	...	11	...	8	...	8	...	9	...	8	...	10
" 20 " 30 "	18	...	21	...	24	...	20	...	24	...	28	...
" 30 " 40 "	18	...	11	...	16	...	8	...	22	...	32	...
" 40 " 50 "	14	...	8	...	15	...	11	...	28	...	16	...
" 50 " 60 "	9	...	8	...	5	...	12	...	15	...	6	...
" 60 " 70 "	8	...	4	...	5	...	9	...	8	...	12	...
" 70 " 80 "	4	...	7	...	7	...	9	...	8	...	6	...
" 80 " 90 "	4	...	4	...	2	...	3	...	3	...	5	...
" 90 " 100 "	...	...	1	...	...	...	2	...	2	...	3	...
" 100 and upwards	...	...	...	...	...	...	...	...	...	...	...	...
Totals	75	180	64	165	74	182	74	144	100	165	103	144
Weekly mortality	205		229		206		218		265		247	

THIRD QUARTER—*Continued.*

Aug. 13.		Aug. 20.		Aug. 27.		Sept. 3.		Sept. 10.		Sept. 17.		Sept. 24.		Total for the third quarter.		
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.	Total.
...	88	...	77	...	76	...	59	...	62	...	48	...	56	...	969	
...	33	...	54	...	27	...	22	...	20	...	28	...	21	...	356	
...	23	...	9	...	12	...	6	...	19	...	17	...	14	...	209	
...	6	...	10	...	10	...	6	...	8	...	6	...	6	...	85	
...	1	...	2	...	4	...	5	...	6	...	2	...	4	...	49	
...	9	...	6	...	5	...	7	...	7	..	5	...	14	...	102	
28	...	37	...	31	...	24	...	26	...	28	...	24	...	323	...	
22	...	45	...	17	...	24	...	20	...	18	...	22	...	275	...	
13	...	23	...	24	...	14	...	11	...	21	...	14	...	207	...	
18	...	13	...	11	...	13	...	13	...	16	...	13	...	152	...	
12	...	11	...	5	...	9	...	7	...	10	...	8	...	108	...	
3	...	5	...	3	...	6	...	3	...	9	...	3	...	68	...	
3	...	2	...	2	...	2	...	3	...	3	...	2	...	33	...	
...	...	...	...	...	...	1	..	...	...	...	...	...	...	9	...	
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	
99	160	136	158	93	134	93	105	84	117	100	101	86	115	1161	1770	
259		294		227		198		201		201		201				2951

TABLE OF

Collated from returns to the Board of Health of Philadelphia,

FOURTH QUARTER. Commencing

	Oct. 1.		Oct. 8.		Oct. 15.		Oct. 22.		Oct. 29.		Nov. 5.		Nov. 12.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Abscess	1	...	...	...	...	...	...	...	...	...	...	...	...	...
" abdominal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" knee	...	...	...	...	...	...	...	1	...	...	...	...	...	...
" liver	...	...	...	...	...	...	...	...	...	...	1	...	...	...
" lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" neck	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" psoas	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" rectum	...	...	...	...	...	...	...	1	...	...	...	...	...	...
" spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" thorax	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" thymic	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Albuminuria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Amenorrhœa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angina pectoris	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Aneurism	...	...	...	...	1	...	...	...	...	...	...	...	...	...
" of the aorta	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Anthrax	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	1	...	4	...	2	...	1	...	1	...	2	...	6	...
Aphthæ	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Asphyxia	...	2	...	...	...	1	...	1	1	1	...	...	...	...
Asthma	...	...	...	...	...	...	1	...	1	...	...	...	...	...
" thymic	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Cachexia	1	...	...	...	...	1	...	...	...	...	...	...	...	...
Cancer and scirrhus	2	...	1	...	1	...	...	...	1	...	...	...	...	...
" of the breast	...	...	...	...	...	...	1	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" liver	...	...	...	...	...	...	...	...	1	...	...	...	...	...
" pancreas	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" rectum	...	...	...	...	1	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Cancrum oris	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Caries	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Casualties	1	...	2	...	1	...	1	...	1	...	4	2	2	...
" burns and scalds	...	1	...	...	1	2	...	1	...	1	1	1	...	2
" concussion of the brain	...	...	...	1	...	...	...	...	...	...	...	...	...	...
" drowned	8	...	1	1	...	...	1	...	9	...	1	...	...	1
" injury of the spine	...	...	...	...	1	...	...	...	...	...	...	...	...	...
" poisoning	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Childbed	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Chlorosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" infantum	...	5	...	5	...	8	...	2	...	3	...	1	...	...
" morbus	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of the liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Colic	...	...	...	...	...	...	...	...	...	...	...	...	...	...

MORTALITY,

for the year 1853, by W. S. W. RUSCHENBERGER, M. D.
September 25, 1853.

Nov. 19.		Nov. 26.		Dec. 3.		Dec. 10.		Dec. 17.		Dec. 24.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.					
2	...	1	...	...	...	...	1	...	...	...	...	4	1	5	9	3	3	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	3	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	2	5	8
...	...	...	...	...	...	1	...	1	...	...	...	2	...	2	...	5	4	11
...	...	...	...	...	...	...	...	1	...	...	...	2	...	2	...	1	...	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	1	2	...	...	...	2	1	...	...	1	...	24	2	26	33	24	29	112
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	...	...	...	...	...	1	...	...	...	1	8	1	9	10	4	15	38
...	...	...	1	...	...	...	...	...	...	...	1	2	2	4	3	3	4	14
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	2	...	5
...	...	...	...	1	...	...	...	1	...	...	...	7	...	7	2	3	9	26
2	...	...	...	...	...	...	...	...	...	...	...	3	...	3	4	1	3	11
...	...	...	...	...	1	1	...	...	...	...	...	1	1	2	4	3	6	15
...	...	1	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	...	...	...	...	...	...	...	2	...	...	...	4	...	4	3	4	...	11
...	...	...	...	...	1	...	...	...	1	...	...	...	2	2	3	5	...	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	1	2	1	5
3	2	...	2	2	1	3	1	2	...	1	...	28	8	31	27	28	29	115
...	...	...	...	...	1	1	2	...	2	1	...	4	13	17	6	9	10	42
...	...	...	...	...	...	...	...	...	11	...	...	...	12	12	2	3	1	18
...	...	...	...	...	...	...	...	...	...	...	...	15	2	17	46	19	6	88
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	3	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	4	3	14
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	4	6	3	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
...	2	...	...	...	...	...	...	...	...	2	...	23	23	333	34	5		395
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	12	4	1	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	2	7
...	...	...	...	...	...	...	...	1	1	...	...	1	1	2	2	...	1	5

TABLE OF MORTALITY.—

	Oct. 1.		Oct. 8.		Oct. 15.		Oct. 22.		Oct. 29.		Nov. 5.		Nov. 12.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Coma	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Compression of the brain	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Consumption of the bowels	...	...	...	2	...	...	...	...	...	...	...	...	...	...
" lungs	14	5	18	2	19	4	18	8	15	3	20	5	2	4
" laryngeal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congestion of the brain	3	1	...	...	...	...	...	1	...	2	1	3	1	2
" liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" lungs	...	1	...	...	...	...	...	...	...	...	...	...	...	...
" spinal marrow	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Convulsions	1	7	...	8	...	10	1	7	...	2	...	5	1	9
" puerperal	1	1	...	...	1	...	1	...	...	...	...	...	1	...
Cramp	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	...	2	...	8	...	8	...	8	...	10	...	10	...	5
Coup de soliel	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Cyanosis	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Debility	4	2	4	1	9	3	6	3	...	5	2	2	...	...
Dementia	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	3	1	2	1	...	...	3	1	1	1	1	1	...	...
Disease of the abdomen	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" brain	...	1	...	...	...	1	...	1	...	...	...	...	...	1
" chest	...	1	...	1	...	...	...	...	...	...	...	...	...	...
" heart	1	...	1	...	...	...	1	...	...	...	2	...	2	...
" hip	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" kidneys	...	...	1	...	1	...	...	...	...	...	...	...	...	...
" liver	...	...	1	...	...	...	...	...	2	...	1	...	...	...
" lungs	2	1	1	1	1	...	...	...	1	1	...	...	...	1
" malignant	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" mesenteric glands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" parotids	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" skin	...	...	...	...	...	...	...	...	...	...	...	1	...	...
" spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	1	...	...	...	1	...	...	...	...	...	1	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" urinary organs	...	...	...	...	...	...	...	...	...	...	...	...	1	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dropsy	...	...	2	2	6	5	2	1	4	2	1	...	4	...
" abdominal	1	...	...	...	1	...	1	...	...	...	...	...	1	...
" of the brain	...	1	...	3	...	3	...	3	...	1	...	2	1	2
" chest	1	1	1	...	...	...	...	...	...	...	2	...	...	...
" heart	...	...	1	...	1	...	...	1	1	1	...	...	1	...
" ovarian	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	3	3	7	7	6	2	1	3	5	5	1	4	...	...
Dyspepsia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Effusion on the brain	...	1	...	...	...	1	...	2	...	...	...	...	...	...
" chest	...	...	...	...	...	...	...	...	...	2	...	...	...	...
" lungs	...	...	...	...	...	...	...	...	...	...	...	1	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Emphysema of the lungs	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Empyema	...	...	...	...	...	...	...	...	...	...	...	...	...	...

FOURTH QUARTER—*Continued.*

Nov. 19.		Nov. 26.		Dec. 3.		Dec. 10.		Dec. 17.		Dec. 24.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.					
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	1	2	7
...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	6	2	3	13
26	5	22	3	20	4	21	3	21	4	14	3	251	48	299	287	317	343	1246
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
2	2	1	1	...	3	...	2	1	1	...	3	9	21	30	65	29	29	153
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	...	1	...	...	1	2	3	1	...	2	4	7	11	11	8	16	46
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	7	...	9	...	3	2	5	1	...	...	13	6	90	96	154	148	132	530
...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	2	1	1	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	4
...	5	...	12	...	7	...	7	...	12	...	9	...	103	103	80	54	108	295
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	36	20	...	57
...	...	...	...	...	...	...	1	...	...	...	2	...	4	4	7	5	3	19
2	1	5	1	...	3	2	3	4	3	1	7	39	34	73	123	91	100	387
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	2
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	1	...	3	5
1	2	...	1	...	2	1	1	...	1	...	...	12	12	24	72	24	10	130
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	3
...	...	2	...	...	3	1	1	...	1	...	2	3	11	14	24	17	20	75
...	...	...	1	...	...	...	...	...	...	...	1	...	4	4	1	1	1	7
1	2	1	1	1	1	2	...	1	...	2	...	15	4	19	27	36	28	110
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	4
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2	1	3	8
...	...	1	...	...	...	...	...	...	...	...	...	5	...	5	4	4	5	18
...	...	2	2	...	2	...	...	...	...	...	...	7	8	15	5	11	3	34
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	2
...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	1	3	4	9
...	...	1	...	2	...	1	...	...	...	...	...	7	...	7	4	4	5	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	4
2	1	...	1	...	...	...	1	4	1	2	...	27	14	41	25	29	53	148
...	...	1	...	1	...	1	...	...	...	...	...	7	...	7	5	6	4	22
...	5	...	1	...	...	1	2	...	3	...	3	2	84	86	58	47	49	190
1	...	...	...	1	...	...	1	3	...	...	1	9	3	12	10	14	10	46
...	...	...	...	...	...	...	...	...	...	...	...	4	2	6	...	7	3	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	1	...	1	...	1	...	1	1	1	1	33	32	65	235	52	22	374
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	1	...	...	...	...	...	3	...	2	...	1	...	11	11	24	15	34	84
...	...	...	...	...	1	...	...	...	...	...	...	...	3	3	2	3	1	9
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

TABLE OF MORTALITY.—

	Oct. 1.		Oct. 8.		Oct. 15.		Oct. 22.		Oct. 29.		Nov. 5.		Nov. 12.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Enlargement of the heart	...	...	...	...	1	...	...	...	...	...	...	...	1	...
" liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" prostate gland	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	...	...	...	...	...	...	...	...	2	...	...	...	1	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Fever	1	...	...	...	...	...	...	...	...	...	...	...	...	1
" bilious	1	1	1	1	1	...	...	1	3	1	...	...	1	...
" cerebral	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" congestive	...	...	...	...	...	2	...	...	1	...	...	...	...	...
" continued	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" gastric	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" hectic	...	...	...	1	...	...	...	...	...	...	...	...	...	...
" intermittent	...	...	1	...	1	...	...	...	...	...	...	1	1	...
" malignant	8	1	2	...	2	...	...	...	1	...	...	...	...	...
" nervous	...	...	...	...	...	...	...	...	1	...	...	...	...	...
" pernicious	...	...	1	...	...	...	...	...	...	...	...	...	...	...
" puerperal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" remittent	1	...	2	1	5	2	1	...	1	1	...	1	...	2
" scarlet	...	5	...	3	...	...	...	6	...	6	...	2	...	2
" typhoid	3	1	...	1	5	2	3	1	4	2	2	1	3	1
" typhus	2	...	2	...	3	...	...	...	1	...	2	1	1	...
" " abdominalis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" " icterodes	5	...	2	...	1	...	...	...	...	...	...	...	...	...
" yellow	6	1	2	...	...	...	...	...	...	...	...	...	...	...
Fistula	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fracture	...	...	...	...	...	1	...	...	...	...	...	...	...	...
" of the leg	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" pelvis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" skull	...	...	...	1	...	...	...	...	...	...	...	...	...	...
" spine	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Gangrene	...	...	...	...	...	...	...	...	2	...	...	1	...	...
" of the lungs	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Gout	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hemorrhage	...	...	...	...	...	...	...	...	1	...	3	...	1	...
" from the lungs	1	...	1	...	...	...	1	...	...	...	...	...	1	...
" stomach and bowels	...	...	1	...	...	...	...	1	...	...	1	...	...	...
" umbilicus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	1	...	...	...	1	...	...	...	...	...	...	...	...	...
Hernia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Icterus	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Ileus	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Inanition	...	3	...	1	1	2	...	1	2	2	...	3	...	...
Inflammation	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" of the bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" brain	1	2	...	2	...	2	1	3	...	2	...	1	2	...
" bronchi	2	2	...	2	1	5	1	3	1	5	...	1	4	1
" chest	...	...	...	...	...	...	...	...	...	...	...	...	...	1
" head	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	1	...	...	1	...	...	...	...	1	...
" kidneys	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" knee	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" larynx	...	2	...	...	...	...	...	...	...	...	...	1	...	...

FOURTH QUARTER—*Continued.*

Nov. 19.		Nov. 26.		Dec. 3.		Dec. 10.		Dec. 17.		Dec. 24.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.					
...	...	...	...	1	...	...	1	...	...	1	1	4	2	6	10	3	5	24
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	3	1	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
1	...	...	...	...	...	1	1	...	...	1	...	6	1	7	6	5	1	19
...	2	1	...	1	...	...	...	2	...	2	1	6	4	10	8	29	25	72
...	...	...	...	1	...	...	...	...	...	1	1	2	2	4	7	6	1	18
...	...	...	...	...	...	1	...	...	...	...	...	8	4	12	26	4	5	47
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	2	2	4	3	...	2	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	4	8
...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	6	2	...	12
...	...	...	...	...	...	...	...	...	...	...	...	13	1	14	38	...	...	52
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	2
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	8	5	12	26
...	...	...	...	...	...	...	...	...	...	...	...	10	7	17	16	10	2	45
...	3	...	6	...	7	...	9	...	5	...	2	...	56	56	32	80	216	384
...	1	2	1	2	2	7	1	2	1	4	3	37	18	55	63	35	45	198
...	...	1	2	3	...	...	...	3	...	4	5	22	8	30	30	45	50	155
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	8	...	8	6	...	...	14
...	...	...	...	...	...	...	...	...	...	...	...	8	1	9	17	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	2	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	1	4
...	...	...	...	...	...	1	...	...	...	1	...	4	1	5	2	3	4	14
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	...	...	...	1	...	...	...	1	...	...	...	2	...	2	...	...	1	3
...	...	1	...	1	...	...	...	...	1	...	...	8	...	8	4	7	5	24
...	...	...	...	...	1	1	...	...	...	1	...	6	1	7	6	5	5	23
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	5	...	6	14
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	5	2	4	13
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	1	...	...	...	1	...	...	3	1	4	6	9	5	24
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	1	3
...	1	...	...	...	2	...	1	...	1	...	...	3	17	20	28	9	15	67
...	...	...	...	...	1	...	...	1	...	...	...	1	3	4	2	4	3	18
2	...	...	...	...	...	1	...	...	...	...	...	3	...	3	2	2	2	9
1	3	...	2	...	...	...	1	1	1	1	...	7	19	26	41	42	47	156
1	2	...	1	2	7	1	7	2	6	1	7	16	49	65	27	37	66	195
...	...	...	...	...	...	...	...	...	1	...	...	...	2	2	3	4	3	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	1	...	...	...	...	...	...	...	3	1	4	2	5	7	18
...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	2	1	2	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	7	9	19

TABLE OF MORTALITY.—

	Oct. 1.		Oct. 8.		Oct. 15.		Oct. 22.		Oct. 29.		Nov. 5.		Nov. 12.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Inflammation of the liver	1	...	...	...	1	...	3	...	1	...	...	...	...	...
" lungs	3	2	1	1	2	...	6	1	2	3	3	4	2	3
" neck	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" parotids	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" peritoneum	...	...	...	...	...	...	1	...	2	...	...	...	...	...
" pharynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" pleura	...	...	...	...	...	...	1	...	1	...	...	...	...	...
" spine	...	...	...	1	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	1	...	4	2	6	...	2	2	6	4	3	1	2
" tonsils	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Intemperance	2	...	1	...	3	...	...	...	...	1	...	...	...	...
Intussusception	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Irritation of the spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ischuria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malformation	...	...	...	...	...	...	...	1	...	1	...	...	...	...
" of the heart	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Mania	...	...	1	...	...	...	...	...	...	1	...	...	...	...
Mania à potu	...	1	...	...	...	...	...	...	...	2	...	...	...	...
Mania, puerperal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marasmus	...	10	...	12	1	9	...	8	...	2	...	6	2	4
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Melæna	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Necrosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Neuralgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Obstruction of the bowels	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Œdema of the lungs	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Old age	2	...	3	...	3	...	2	...	3	...	5	...	1	...
Ossification of the heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palsy	2	1	...	...	...	...	...	...	1	...	...	...	3	...
Perforation of stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phlebitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phlegmasia dolens	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purpura	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Rheumatism	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Rupture of the urethra	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Scrofula	...	1	...	1	1	...	...	...	...	1	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Softening of the brain	...	...	...	1	...	...	...	2	...	...	...	1	...	...
" stomach	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spina bifida	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Stillborn	...	14	...	8	...	12	...	10	...	7	...	7	...	8
Stone	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stricture of the urethra	...	...	...	...	...	...	1	...	...	...	...	...	...	...
" bowels	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Suffocation	...	...	...	...	1	...	...	...	2	...	...	...	...	...
Syncope	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Tabes mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Teething	...	...	...	...	...	...	...	...	2	...	...	...	...	1

FOURTH QUARTER—*Continued.*

Nov. 19.		Nov. 26.		Dec. 3.		Dec. 10.		Dec. 17.		Dec. 24.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.					
...	...	...	...	...	...	...	...	...	...	...	...	6	...	6	13	6	3	28
3	9	5	2	2	8	...	6	3	5	...	6	32	50	82	45	115	104	346
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
...	...	1	...	1	...	...	...	1	...	...	...	6	...	6	14	24	18	62
...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	1
...	...	2	...	1	1	...	...	...	...	...	...	5	1	6	1	5	3	15
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	3
3	3	1	2	1	...	1	1	1	3	1	4	17	37	54	33	68	55	260
...	...	...	...	...	...	1	...	...	...	...	1	1	1	2	...	1	2	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	3	4	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
5	...	1	...	3	1	1	...	...	...	1	...	18	1	19	18	11	5	53
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	2	...	...	...	...	...	...	...	...	...	4	4	4	4	5	17
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	1	4
1	...	...	...	1	...	...	...	...	...	...	...	4	...	4	1	...	1	6
2	...	...	...	...	...	1	...	1	...	...	...	7	...	7	29	17	13	66
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	1	5
...	7	2	6	1	3	...	2	...	5	...	4	6	78	84	147	88	54	378
...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	1	5	5	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	...	5
...	...	...	...	...	...	...	...	1	...	...	...	2	...	2	3	2	2	9
...	...	...	...	...	...	...	...	...	1	...	...	1	1	2	...	...	...	2
3	...	...	...	1	...	3	...	3	...	5	...	34	...	34	29	30	42	135
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	3
3	...	...	...	...	...	1	...	4	...	...	...	14	1	15	17	15	18	65
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	1	1	2	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	7	3	2	14
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	7	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	...	1	4
...	1	...	...	...	...	...	3	...	...	...	...	2	6	8	16	12	20	56
...	...	...	...	...	...	1	...	1	...	...	...	1	...	1	3	24	24	57
...	...	...	...	...	...	...	...	...	...	...	...	5	...	5	1	2	6	14
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2	1	4
...	11	...	4	...	6	...	11	...	14	...	11	...	128	128	186	153	159	571
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	1	3
...	1	...	...	...	...	1	...	...	...	...	...	1	4	5	2	2	7	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	...	...	1	...	...	...	...	...	...	...	1	1	2	4	1	...	7
...	...	...	1	...	...	...	1	...	...	...	2	...	6	6	14	8	9	37
...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	3	4	4	19

TABLE OF MORTALITY.—

	Oct. 1.		Oct. 8.		Oct. 15.		Oct. 22.		Oct. 29.		Nov. 5.		Nov. 12.	
	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.
Tetanus	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Trismus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis	...	...	...	1	...	1	1	...	1	...	...	...	2	...
Tumor	...	...	1	...	...	...	...	...	...	...	...	...	...	...
" abdominal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the brain	1	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tympanitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulceration	...	...	...	...	...	...	...	...	...	...	1	...	...	...
" of the larynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" neck	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	...	1	...	...	...	...	...	...	...	1	1
" throat	...	...	...	1	...	...	1	...	1	...	...	...	...	...
Unknown	8	8	2	...	4	1	1	1	8	1	8	1	1	...
Varicella	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping-cough	...	8	...	1	...	...	...	1	...	4	...	2	...	1
Worms	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wounds, gunshot	...	...	...	...	...	...	...	...	...	...	...	...	...	...
From the almshouse		16		16		19		12		14		11		8
From the country		2		4		1		1		1		8		8
People of color		6		11		14		9		8		9		8
Under 1 year	...	42	...	88	...	46	...	88	...	88	...	40	...	28
From 1 to 2 years	...	22	...	17	...	17	...	14	...	25	...	6	...	6
" 2 " 5 "	...	17	...	16	...	15	...	20	...	19	...	18	...	14
" 5 " 10 "	...	9	...	6	...	9	...	7	...	5	...	9	...	18
" 10 " 15 "	...	8	...	8	...	8	...	8	...	2	...	1	...	1
" 15 " 20 "	...	7	...	7	...	8	...	4	...	...	...	4	...	8
" 20 " 30 "	88	...	18	...	23	...	18	...	88	...	14	...	21	...
" 30 " 40 "	19	...	18	...	14	...	14	...	20	...	15	...	19	...
" 40 " 50 "	19	...	16	...	24	...	6	...	11	...	19	...	14	...
" 50 " 60 "	8	...	11	...	18	...	7	...	6	...	9	...	11	...
" 60 " 70 "	12	...	6	...	10	...	18	...	6	...	4	...	8	...
" 70 " 80 "	7	...	5	...	9	...	8	...	4	...	7	...	7	...
" 80 " 90 "	...	...	2	...	8	...	3	...	5	...	2	...	1	...
" 90 " 100 "	...	...	2	...	1	...	1	...	...	...	1	...	1	...
" 100 and upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	98	100	78	87	102	98	65	81	85	89	71	78	82	65
Weekly mortality		198		165		195		146		174		149		147

FOURTH QUARTER—*Continued.*

Nov. 19.		Nov. 26.		Dec. 3.		Dec. 10.		Dec. 17.		Dec. 24.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adult.	Minor.	Adults.	Minors.					
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	4	2	3	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	2	6
...	...	...	...	...	...	...	1	...	...	1	...	5	3	8	3	2	5	18
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	1	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	2	...	...	...	3	3	...	2	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	1	...	...	...	...	...	...	1	4	2	6	7	2	1	16
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	5	1	5	14
3	2	...	2	3	...	3	4	3	...	1	2	30	17	47	62	53	56	218
...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	2	...	...	...	3	...	1	...	18	18	38	5	3	64
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
9		12		11		12		7		6				123	183	174	191	671
...		...		...		3		1		...				19	34	23	29	109
10		6		10		15		4		5				115	184	193	187	67
...	44	...	29	...	33	...	34	...	52	...	59	...	516	516	969	610	627	2722
...	15	...	14	...	13	...	17	...	13	...	21	...	200	200	356	188	224	968
...	16	...	16	...	16	...	25	...	18	...	11	...	221	221	209	262	326	1018
...	4	...	5	...	9	...	6	...	8	...	8	...	98	98	85	92	150	425
...	3	...	4	...	4	...	...	...	2	...	2	...	31	31	49	49	41	170
...	5	...	4	...	3	...	6	...	3	...	9	...	58	58	102	77	64	301
														1124	1770	1278	1432	5604
19	...	11	...	19	...	19	...	20	...	15	...	258	...	258	323	243	246	1070
17	...	15	...	16	...	19	...	21	...	11	...	218	...	218	275	223	208	924
10	...	10	...	6	...	9	...	9	...	8	...	161	...	161	207	152	158	678
8	...	9	...	11	...	8	...	11	...	5	...	122	...	122	152	122	123	519
9	...	9	...	8	...	8	...	8	...	3	...	104	...	104	108	108	116	436
5	...	4	...	4	...	2	...	11	...	3	...	76	...	76	68	73	73	290
3	...	2	...	...	...	5	...	...	...	5	...	31	...	31	38	40	44	153
1	...	...	...	...	...	...	...	...	...	1	...	8	...	8	9	6	11	34
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	1	...	1	3
72	87	60	72	65	78	70	88	80	96	51	110	979	1124		1181	967	980	
159		132		143		158		176		161				2103	2951	2245	2412	9711

COD-LIVER OIL IN CONSUMPTION.

Dr. WOOD remarked, that he had looked to the obituary tables accompanying, from year to year, the reports on meteorology and epidemics, with deep interest, in reference to an important therapeutical question—the efficacy of the cod-liver oil in the treatment of pulmonary consumption. The oil has been almost universally employed in this disease; and, during the first years after its introduction, a most striking effect was observed—the number of deaths from consumption diminishing surprisingly. Now, there appeared to be no other cause to which this diminution of deaths could be attributed, excepting the use of cod-liver oil. Still, Dr. Wood had been fearful of attributing too much to the influence of this agent, inasmuch as it was known to have the effect of postponing the fatal event—of prolonging without eradicating the disease—and, hence, might cause the mortality from consumption to be thrown into future years. Dr. Wood had looked with some solicitude to the report for the past year, for a solution of this question; and he was happy to find the augmentation in the deaths from consumption, in 1853, no greater than as indicated by the report. This speaks very favorably for the remedial powers of cod-liver oil. There was to be anticipated an increase in the mortality from consumption during the past year, as the postponed mortality of the disease in former years would be thrown upon this. Hence, from a decrease in the proportion of deaths from consumption, since the period when it used to be between a sixth and a seventh of the whole mortality, we have a right to infer that we have gained something from the use of the oil in that disease; probably that we have cured by it one in every eight cases, with the anticipation of a still larger proportion hereafter.

FRACTURE OF LOWER END OF THE RADIUS.

Dr. HENRY H. SMITH exhibited, for the inspection of the Fellows, a preparation, showing the condition of parts in an unreduced fracture of the lower end of the radius, and of the styloid process of the ulna. The radius was broken obliquely across its carpal extremity, from a point six lines above its styloid process to the

surface for articulating with the ulna, in a line which nearly corresponded with the epiphysis of this end of the bone. The styloid process of the ulna was also broken, and an external lateral dislocation of the hand had ensued. The fracture had united with deformity, and was evidently of long standing. Dr. Smith knew nothing of the history of the case, the preparation being obtained from a subject aged about thirty-five years, which was brought into his operating rooms. In the descriptions usually given of fractures at the lower end of the radius, nothing is said as to the coincidence of the fracture in the styloid process of the ulna, as seen in this preparation, yet its influence in producing the dislocation seen in this injury is very evident. As there are few opportunities for obtaining specimens of the condition of the parts involved in the fractures near the wrist joint, Dr. Smith regarded the present one as peculiarly valuable, and especially from its illustrating the principles to be observed in the treatment of the injury. A glance at the preparation will at once exhibit the manner in which the splint devised by Dr. Bond for fractures of the lower end of the radius, acts in the prevention of deformity. Dr. Smith had never seen a specimen which corresponded with the description of the fracture designated as that of Dr. Barton.

CASE OF CHOLERA.

Dr. GREENE related a case of disease having many of the features of spasmodic cholera. The patient was seized suddenly, at six o'clock in the morning, with vomiting and purging, having seven or eight fluid evacuations, of a rice-water appearance, in quick succession; with cramps of the extremities, coldness of the limbs, thirst, blue lips, husky voice, and a very small, scarcely perceptible pulse. He was treated with calomel, opium, and sugar of lead, internally; sinapisms and stimulating frictions to the surface, and bottles of hot water to the extremities.

Reaction took place in three or four hours, and in the evening the patient was tolerably well. The slight nausea and retching, which continued for some time, were treated in the usual way.

There was no evacuation of the bowels, nor any discharge of urine, for more than *forty-eight hours* from the commencement of reaction.

The patient was a temperate man, living comfortably, in dry and well-ventilated apartments. He is now entirely well.

MORBUS COXARIUS.

Dr. NEILL remarked, that recently some interest had been excited in regard to the pathology of coxalgia, in consequence of a paper read before the American Medical Association, in May last, by Dr. March, of Albany, N. Y., and published in the sixth volume of the *Transactions* of that body. In this paper certain views, in reference to the condition of the hip-joint in coxalgia, different from those entertained by the generality of the more authoritative writers on the disease, are strongly enforced by Dr. March. It becomes important, therefore, that all who possess preparations of the hip-joint, from patients who had died while laboring under the disease, should carefully examine them in reference to the main question in dispute; the cause, namely, of the shortening and distortion of the affected limb.

Dr. Neill had but few preparations to present, and to these he begged leave to call the attention of the Fellows. The one was obtained from an adult subject, some 60 years of age, who had for a number of years exhibited the ordinary results of coxalgia. The abnormal state of the acetabulum, in this preparation, consisted in a filling up of its cavity by a cartilaginous and fibrous deposit, and an enlargement of its area from absorption of the parietes at its upper and posterior margin. The entire head and neck of the femur are absorbed. There was no dislocation of the bone; a smooth surface, near the base of the trochanter major, corresponded to the surface of the enlarged and flattened actetabulum. From this specimen we learn this important fact, that the muscles inserted in the femur do not, in all cases of coxalgia, act with sufficient force to displace the upper end of the bone, consequently, that shortening and distortion of the limb in that disease are not necessarily the result of dislocation.

The second preparation was from a child six years old. The patient had been admitted into the Pennsylvania Hospital, laboring under coxalgia and a scrofulous condition of the system. She died from marasmus. The head and a portion of the neck of the thigh bone are destroyed by disease—nevertheless, there is no

dislocation; the upper portion of the bone still resting in contact with a diseased acetabulum.

Dr. Neill exhibited a third preparation from the collection of Prof. Gilbert. In this there was evident disease of the acetabulum, but no indications that dislocation of the femur had existed.

VACCINATION.

DR. WALLACE stated that he had been lately called upon to prescribe for a female labóring under a severe attack of varioloid. She was the mother of four children, one of which was at the breast; all of whom, excepting the youngest, had been vaccinated. In the eldest, the scar on the arm was well marked and perfect; the two next presented an irregular and imperfect scar. Dr. Wallace immediately vaccinated them all. On the tenth day after this, and the fourteenth from that on which the mother experienced the premonitory symptoms of the disease, three of the children sickened. The eldest escaped. The two next had a slight eruption of varioloid papulæ, which did not assume the pustular form, some thirty or forty pocks appearing on one of them, on the other about a dozen. The infant at the breast had a slight attack. The vaccination performed by Dr. Wallace took effect.

The Doctor also stated, that he had attended a female whose body was covered with variolous eruption. On the day after the eruption appeared, she was delivered of an infant, at the end of seven and a half months of utero-gestation. The infant was immediately vaccinated, and, although it was suckled by the mother and constantly slept with her, it never took the disease. The vaccination was successful.

Stated Meeting, April 5, 1854.

Dr. Meigs, Vice-President, in the chair.

Present, forty members.

The following gentlemen were elected Fellows: Herman Robinett, M. D., Wm. Hunt, M. D., R. A. F. Penrose, M. D., Charles Neff, M. D.

The *Transactions of the American Medical Association*, Vol. VI., was received for the Library, from the Committee of Publication; and, *A Treatise on the Acute and Chronic Diseases of the Neck of the Uterus*, by Charles D. Meigs, M. D., from the Author.

Dr. La Roche presented the following:—

REMARKS ON THE ORIGIN OF THE YELLOW FEVER WHICH PREVAILED IN PHILADELPHIA, IN 1853.

The source of the yellow fever epidemics which have at various times, from the year 1699 to 1853, prevailed in this city, has ever been a subject of inquiry, and given rise to much and often angry controversy. In early times, the disease was almost universally attributed to a foreign origin; or, if some physician looked for its cause to local or domestic sources of infection, little or nothing was done by him to enforce his opinion. His voice was at once drowned amid the clamor of the importationists; according to whom, and to the public at large, it was always easy to trace the fever to the arrival of some vessel from an infected West India port. During the fearful epidemic of 1793, the question was again agitated. On that occasion the theory of local origin was early and warmly advocated by several of the leading physicians of this city; not only by the few who, as Deveze and other French practitioners who happened to be here at the time, refused to admit the agency of the sick in the propagation of the disease, but by several of those who adhered to the doctrine of contagion. From that day to 1820, the belief in local origin steadily and successfully gained ground; so much so, indeed, that when, a short

time after the epidemic of that year, the late Dr. Chervin visited the city for the purpose of collecting information relative to the origin of the fever among us on that and other occasions, the advocates of importation were, with one solitary exception, found among those of the older physicians, who, in former days, had taken an active part in upholding that creed.

The reappearance of the disease in its true and unmistakable garb last summer has, to a certain extent, tended to revive the question, after an interval of more than thirty years. Once more we find physicians disposed to lend a willing ear to the belief of the exotic origin of the fever, and though few among them would be willing to concede, that the introduction of the latter was effected through means of a contagious virus emanating from the sick, and though all freely recognize the existence, in the localities in which the sickness broke out and prevailed, of causes of a nature well calculated to contaminate the atmosphere; yet they connect, some how or other, the origin of the fever with the importation from abroad of an infectious germ, and think it doubtful, if not improbable, that the disease would have broken out among us, had not a foul vessel, coming from a sickly port, or carrying in its hold or other parts a focus of poisonous exhalations, reached the city.

Such are the views now suggested by some physicians of this city, and more particularly by an esteemed Fellow of this College (Dr. Jewell), whose valuable and interesting historical and statistical notice of the epidemic of last summer has been inserted in the last volume of our *Transactions*. Although he does not openly avow his belief in importation, and enforce it in positive terms, enough is said by him to lead us to the conclusion that he is not friendly to the doctrine of a strictly local origin.

As might have been expected, the disposition to explain the occurrence of the disease in the way mentioned, has found favor among importationists abroad and in this country, who point triumphantly to the facts he records, and the influence he ascribes to the arrival of the barque Mandarin. The author of a report recently presented to the City Council of Charleston, has no hesitation in considering this importation as "a fact too well authenticated to be disproved." Others, without expressing an opinion on the subject, allude to the introduction of the

fever by the Mandarin, as if it were a circumstance upon which there is not and cannot be a difference of sentiment; while, from private communications which I have received from various quarters, it may be inferred that the impression left on the minds of those who have read Dr. Jewell's essay, or the accounts of it which have appeared in the medical journals, has already extended far and wide. It will be found also, that from the doubts Dr. Jewell seems to entertain respecting the strictly local origin of the fever, and his suggestion relative to the agency of a vessel from tropical climates in the production of the evils of last autumn, has arisen the belief in more than one quarter, that the opinion so long and so generally held by the physicians of the city in relation to this subject, has experienced a complete revolution, from a consideration of the facts recently observed among us; that we now admit that, whatever may have been the case in former times, the yellow fever may be, and sometimes is, imported from abroad, and, when so imported, will spread epidemically, and that such is the opinion of this College, as a body, inasmuch as the views alluded to were read at our meetings, allowed to pass without protest or comment, on the part of any one present, and published in our *Transactions*.

Entertaining views very different from those to which attention has been called respecting the origin of the late epidemic; perceiving nothing in the facts recorded by Dr. Jewell calculated to cause me to forego the opinion which a careful examination of the various epidemic visitations of the yellow fever in this and other cities of the United States and of Europe, has led me to adopt respecting the non-importation of the disease, and its constant dependence on sources of infection in the localities where it appears; knowing full well that the supposed change in the minds of the medical men of this city as regards the matter in question, if it has taken place at all, is far from being general; and feeling desirous of recording my dissent from the views set forth, I propose to occupy the attention of the College with an inquiry as to how far the facts which have occurred warrant the conclusion that the yellow fever of last year was of exotic origin, and not the product of domestic causes.

The grounds upon which the belief in question has been founded are the following:—

1. A vessel, the barque Mandarin, left Cienfuegos, Cuba, for this port, on the 25th of June, all in good health, with a cargo of sugar, molasses, and cigars.

2. At the time of her leaving Cienfuegos no epidemic prevailed there; but, according to the report of the captain, "a few cases of smallpox and fever existed." The crew lived on board while in port, anchored off the town, were seldom on shore, and, as far as the captain knew, none of them had visited the sick.

3. The vessel arrived at the Lazaretto July 12, after a passage of seventeen days; her crew originally consisting of twelve men. Of these, two died of fever during the passage. The first was attacked when eight days out from Cienfuegos, July 3, with fever, and died on the 7th. The second sickened on the 4th of July, and died on the 9th.

4. At the time of arriving at the Lazaretto the crew, numbering ten souls, were, on examination, found to be in good health. Nevertheless, it was considered prudent, that the barque should be detained until thoroughly ventilated, cleansed, and fumigated. The bedding and clothing of the deceased sailors were destroyed, the vessel was whitewashed and fumigated in every part with chloride of lime, while the bedding of the crew were aired and their clothing washed. She was detained an entire day.

5. The Mandarin reached the city on the 13th of July, and came to at South Street wharf. On the 16th, she was hauled up to the lower side of the first pier below Lombard Street, where she discharged her cargo. On the 20th, seven days after her arrival, she dropped down to the lower side of the first pier above Almond Street, where she remained until the 26th. From this she was removed, by the Board of Health, to the cove below the Navy Yard, whence, on the 28th, she was remanded to the Lazaretto, in order to undergo a more rigid and thorough purification. The crew having been previously discharged, the captain and mate remained by her, sleeping on board.

6. There was no disease of a malignant type in the vicinity of where the vessel lay, "as far as has been ascertained," either before or during the time of discharging her cargo. No epidemic was prevalent in any part of the city. There appears to have been no cause for alarm until the cargo was out of the vessel, when it was noticed that a very offensive smell proceeded from

her hold. Subsequently, but not before the vessel had been removed to Almond Street wharf, the stench became intolerable, especially whenever the pumps agitated the bilge-water contained under the limber planks or flooring of the hold.

7. The first case of a suspicious character which occurred in the neighborhood was on the 19th of July, six days after the Mandarin reached South Street wharf, three days after she was removed to the pier below Lombard Street, and the day before she left this last position for Almond Street wharf. The individual attacked drove a furniture car, and stood on the upper side of South Street. On the next day, the 20th, five new cases occurred, all in persons residing near, or frequenting many times a day, South Street wharf, or the vicinity. The next, or seventh case, was the mate of the Mandarin. He was attacked on the 21st. Other cases occurred that day and the following, all of whom were traced to South and Almond Street wharves, and other neighboring localities. On the 23d, consequently, while the Mandarin lay at Almond Street, the captain was seized with the disease. He was removed to Clements's Hotel, Delaware Avenue, between South and Lombard Streets, where he recovered.

8. From this time the fever gradually spread, but all the cases that occurred up to the 27th of July either resided in or did business in the vicinity of South Street wharf. "Nor is it known," says Dr. Jewell, "that any case originated below or south of where the vessel had been last moored, nor has any case come within our knowledge north of Lombard Street." Subsequently, however, the disease extended and assumed the character of an epidemic, occupying, with few exceptional cases, a locality extending from Union Street north, to Queen Street south (about 600 yards); Second Street west, and the Delaware on the east (200 yards). It did not cease before the middle of October.

It appears, therefore, from the foregoing statement, that a vessel arrived from a port of Cuba, where, at the time of her departure, there did not prevail any epidemic of malignant disease, but only a few cases of smallpox and fever; that a few days after her departure, two of her crew died of fever; that the bilge-water was in an impure state, and emitted an offensive smell; that when she reached the wharf, the vicinity of the place, as well as

the city generally, enjoyed the usual ratio of health of the season; that a few days after her arrival, the yellow fever broke out in the vicinity of the place where she lay; that the disease, during some days, remained circumscribed within a very short distance of the spot where it first broke out, and that, with a few exceptions, it continued to prevail in the neighborhood of South Street wharf, occupying an area of two or three squares in a northern and southern direction, and of a third of that distance westwardly. From these facts, it is concluded that the fever, which thus prevailed among us, must be referred "to the agency of some uncommon and virulent poison diffused through the atmosphere;" that when all the facts are taken into careful consideration, "this poison, whatever may be the nature of its character, must, in part, be ascribed to a morbid effluvium, generated under the limber-planks in the hold of the aforesaid vessel, from the putrescent state of her bilge-water;" that the noxious emanations which had been latent in the hold, under the limbers of the vessel, had an opportunity, after the cargo was discharged, and when acted upon by certain exciting causes, as heat and moisture, to disseminate themselves, and that, by coming in contact with other elements of decomposition existing on shore and in the docks, they soon poisoned the atmosphere of the immediate neighborhood to where the barque lay moored, and thereby created the evils referred to. We have here, should the conclusions or inferences alluded to prove well founded, an example of the introduction from abroad of a poison, which, by infecting the atmosphere, and by meeting in the localities where it was first let loose, other elements of decomposition, has been enabled, through their co-operation, to multiply itself long after the alembic in which it was distilled had been removed, and to spread the yellow fever far and wide, and thereby destroy the lives of near two hundred individuals. How far these views are entitled to adoption, remains to be seen.

The inquiry is one well worthy of the serious attention of every philosophical physician, involving, as it does, public interests of great magnitude. Prove the exotic origin of yellow fever in this case, and you establish, beyond doubt, the probability, if not the certainty, of similar occurrences at subsequent periods, and lend, in consequence, a most powerful aid to the advocates of stringent quarantine regulations. On the other hand, disprove the creed

of importation in the case before us, and show that, in all probability, the disease arose in our midst from local causes, and spread by means of influences over which quarantines have no control, and you will do something towards showing the propriety of paying less attention to the question of guarding against the intrusion of the poison from distant parts, than to the establishment and enforcement of the sanitary measures required to prevent its elaboration around us. I do not perceive how we can be deterred from striving to show the local origin of the fever of last summer, and to point out the impossibility of establishing, from the facts recorded, the opinion of its introduction through the agency of the Mandarin, by the circumstance that it is no honor to Philadelphia "to be the parent of such a pestilence, and that it is no credit to her sons to endeavor to prove her so to be." Objections of this sort have been started recently in reference to occurrences in one of our southern cities, some of the physicians of which are now striving with characteristic patriotism, to nullify the long entertained opinion of that city being frequently the focus of yellow fever infection. These objections flow from the feeling, to which attention was called half a century ago, by Humboldt, and which prompts men, in all places, and in all latitudes, to refer the pestilential diseases by which they may be visited to a foreign source. At the risk of being accused of want of filial affection for my native city, I cannot withhold the expression of the hope, that no one among us will be influenced by considerations of the sort in the investigation of etiological subjects so interesting in a scientific point of view, and of so much importance to the public, and that we all feel the propriety, whatever dishonor may be regarded as attached to the fact, of avowing, if compelled by the nature of the case, that the disease was last year and has always been produced by causes existing in our midst.

Before proceeding to the inquiry, it may be proper to remark that, while Dr. Jewell affirms he is "no blind adherent to any favorite theory for the spontaneous or domestic origin of yellow fever, nor yet an uncompromising opponent of those who advocate the doctrine of a contagious principle, capable of being carried about from place to place, and, under a train of favorable circumstances, productive of disease," he admits, frankly, that, in the instance before us, the poison introduced was not of a contagious

character. Nothing is said to justify the inference that the infection of the vessel arose from the introduction therein of an effluvium or virus emanating from the sick at Cienfuegos. We are not given to understand that the sailors who sickened and died during the passage, had taken the disease in that way, or left anything on board capable of contaminating the vessel, and communicating the fever to those who neared or visited her after she reached the city. So far from entertaining such views, Dr. Jewell says, in his first communication to the College, read on 5th of August, "upon the first glance at the Mandarin, and the history of her voyage previous to her arrival at Philadelphia, the advocates for a contagious germ for yellow fever, or in other words, a principle emanating from the sick, and capable of being conveyed from one person to another, as the focus for the fever which has threatened our city, may imagine they have discovered another instance in support of their favorite theory. This, however, we are persuaded, can hardly be the case, although we are desirous that a careful review of the facts connected with the ill-fated vessel should speak for itself." A little further on he states, that "in no case was the disease communicated to any person visiting or engaged in attendance upon the sick." Even after the close of the epidemic, when he had had ample opportunities for investigating the mode of propagation of the disease, and conferring with those well qualified to decide in matters of the kind, Dr. Jewell found no reason to believe in its contagious nature. "In no instance," he says, "can it be shown that the disease has spread from those laboring under the fever. At the Pennsylvania Hospital, the yellow fever cases were intermixed in wards with numerous other patients, some ill, and others convalescing from disease, but not an individual, either among the patients, nurses, or visitors, contracted the fever. The like immunity was observed with the cases treated in the Blockley, St. Joseph's, and Bush-Hill Hospitals. In private practice, although numerous cases were attended away from the infected portion of the city, we have yet to learn that the disease, in a single instance, was propagated from the sick to the well, although there was an unrestrained intercourse between the patients and their immediate friends."

Such being the case—and no physician who has inquired into the matter during the last summer and autumn, and watched the

progress of the disease from place to place, and the history of the individual cases, from the outbreak to the close of the epidemic, will feel disposed to refuse his sanction to the above statement—such being the absence of any contagious element on board of the vessel during her stay at Cienfuegos, during her voyage, or at the time of her arrival; such the absence of any power of transmissibility of the fever from the sick after the fever had broken out among us, we naturally infer, that if any poison was derived from the culprit-vessel, and was the means of introducing the yellow fever in this city, that poison was not the product of a diseased body, in other words a contagious virus. Dr. Jewell admits this, and even if he did not do so, the inference would be natural; for a fever which, during the whole course of its epidemic career, covering a space of full three months, did not, in a single instance, and under every variety of circumstances, betray the least approach to its possessing contagious properties, can scarcely be supposed to have been derived from a contagious poison proceeding from abroad, or created on shipboard—supposing the thing possible—and left among us after the departure of the vessel which had conveyed it to our port. No, the poison, supposed to have been introduced here, must, and it is stated to have been the result of causes operating in the hold of the vessel itself—the product of the decomposition of materials contained under the limber planks, or in other parts.

Now, an attentive examination of all the facts adduced in reference to the subject in question, and to which attention has been called above, leaves no doubt on my mind, that no such poison was derived from the barque Mandarin; that she had no agency in the production of the fever; that the latter was due to the operation of local causes situated in the vicinity of the place where it broke out and prevailed; that these causes were similar to those which have given rise to the same disease at other times, here and in other situations, and that the fever would have prevailed just as surely had no such vessel arrived from the West Indies.

In the first place, there is no proof—nay, there is no reason to believe—that the sailors who sickened and died on the passage, admitting that they had the yellow fever, a circumstance which has not been proved, took the disease from causes existing in the

vessel. It is just as likely their sickness was due to a febrific poison inhaled by them while at Cienfuegos. We are told, that though no epidemic was prevailing at that place at the time of their departure, sporadic cases had occurred. They generally do so at that season of the year in all the West Indian ports among unacclimatized strangers and especially sailors. The cause of fever, therefore, was in operation in the town; and we know, that the crew of the Mandarin were, if not *often*, at least *sometimes*, on shore, where doubtless they indulged in *sprees*, as sailors are very apt to do. What prevents those who suffered at sea from having imbibed the seeds of the fever when they landed? Or, supposing them not to have landed, what prevents the febrile poison from having been wafted to the ship which was anchored off the town, and of course at no great distance from the latter, and certainly not beyond the reach of malarial effluvia? Such things have often occurred in tropical ports where there are no wharves or quays; where vessels are all anchored off the town, and where, unless the distance is great, or some intervening cause exists, the men are liable to receive the infection although carefully refraining from going ashore. Add to this, that the men, as I have lately learned, slept not in the forecastle or other parts below, on account of the oppressive heat that there prevailed, but in the longboat; and that those that died were only taken below after they had sickened. Now, of all places on shipboard, the longboat is about the last where the yellow poison could be expected to be formed or to lurk. As well might we suppose it to be formed in the rigging.

The period at which those men sickened cannot be urged in disproval of the opinion here suggested; for it is not uncommon, especially when the epidemic influence is not very violent, to find the disease breaking out on the 8th and 9th day after exposure, as was the case in the instances in question, and even later. The very circumstance of the two men taking sick in such rapid succession, would lead me to infer they had imbibed the seeds of the disease before leaving Cienfuegos; for it is not probable, had the poison been formed and exhaled in the vessel, that the two cases would have occurred almost simultaneously, and that the disease would then have ceased to appear until some days after her arrival. The occurrence, of course, is possible. It appears to me, however,

more probable, had the fever originated from local sources of infection existing on board, that the cases which occurred would have done so at a longer interval from each other, or, what might be still more natural to expect, that the disease would have continued to show itself off and on during the rest of the passage. So far, however, from this occurring, no one else on board appears to have suffered from sickness; for when the vessel arrived at the Lazaretto, and the men, ten in number, were examined by the physician, they were all found to be in good health; and the captain, before being permitted to proceed to the city, declared on oath, that no sickness, except that resulting in the death of the two seamen, had occurred during the voyage.

This was on the 13th of July. On the 16th, the vessel having been hauled up to the lower side of the first pier below Lombard Street, the crew was discharged, the captain and mate alone remaining. None of the men so discharged were since ascertained to have died or sickened. Now, had the Mandarin really been in an infected state, the result here adverted to could not very well have obtained. On examining the records of vessels in which the yellow fever has truly originated and prevailed, matters are usually found to assume a different course. In all, the proof of this origin is established on something more substantial than the sudden appearance of two cases, preceded and followed by the perfect healthiness of everybody else on board. Nor is this all. Had the Mandarin been the focus of infection—had she contained the seeds of the disease in her hold, we might have expected to find those who were subsequently employed on board to suffer, in greater or less number, from the disease instead of escaping to a man, while others at a distance were attacked. Such certainly has not been the result in instances in which the poison was undeniably formed on shipboard. Now, what has been the case in respect to the Mandarin? We are told, that none of the laborers employed in unloading her, and who must have been sufficiently exposed, in all conscience, to the action of the poison had it been elaborated and accumulated in the hold, took the disease. Furthermore, on the 26th, when the cargo had been discharged, when the hold had been opened, when the disease supposed to have been introduced by her, had already broken out, when, as it is stated, the noxious emanations which had been latent in the hold and

under the limbers of the vessel had an opportunity to escape from their place of confinement, when, of course, the vessel must have been saturated with them, and when cases of fever are supposed to have originated from merely sitting some hours in her vicinity while she lay at Almond Street wharf;—on the 26th, I say, the Mandarin, by order of the Board of Health, was taken in charge by the Health Officer, who put on board a crew of five men, including the watchman. These men remained in her from that date up to the 29th of July, when she was safely anchored inside the island of Little Tinicum, opposite the Lazaretto, and placed in charge of the quarantine-master. What was the result? Did any of these men suffer from the deleterious effects of the poisoned atmosphere of this vessel? No, far from it. "Neither the Health Officer nor any of his men, nor did the watchman who remained on board until after her purification and return to the city, experience an hour's sickness." At the Lazaretto, the Mandarin remained from the 29th of July to the 2d of August; several of her limber planks were removed. "She was then scuttled and filled with water, which remained in her twenty-four hours. The holes were then plugged up and the water pumped out. Next, she was thoroughly whitewashed, and, in every part of her, chloride of lime was freely distributed."

All these operations—which, let it be said in passing, are not, under conditions of atmosphere such as those that existed at the time, very generally successful in eradicating the disease from a really infected ship—require considerable exposure on the part of the individuals employed in carrying them out, and yet we are told that, during this process of expurgation, "the Quarantine Master, with several of the bargemen at the station, were on board and at work in the hold, cabin, and other parts of the vessel for several hours during each day—the weather excessively hot—without any inconvenience to their health." On her return to the city, the 3d of August, she was moored at Noble Street wharf, Northern Liberties, where she remained until the close of the month; then was removed to the screw-dock, Kensington, for repairs, and on the 6th of September was taking in cargo between Arch and Race Streets, preparatory to a voyage to New Orleans. In these different localities, no cases could be traced to exposure to the atmosphere in or near the vessel. Indeed, as we are in-

formed by Dr. Jewell, no sickness whatever followed in her track after she left Almond Street wharf on the 26th of July.

A result of this kind could scarcely be looked for had the vessel been the focus of infection. It is one which could not be anticipated by those who have examined the history of vessels in which the fever poison originated. In such instances, the danger of infection is far greater to those who are on board, especially if employed below, than to those who remain outside; while in very many cases the danger is limited exclusively to the former; and, it is well known, that the operation of expurgation, when performed in yellow fever regions, and especially during hot weather, is one of great danger to all but Kroomen and negroes, to whom, on the Coast of Africa and in the West Indies, it is exclusively assigned. In the instance of the Mandarin, however, the danger was, as it would seem, the share of those who abstained from going aboard and remained at a greater or less distance, many of whom not only did not approach her, but did not, nor could, in any possibility, see her.

Let it not be said that both the captain and the mate of the Mandarin, who remained and slept on board after the crew had been discharged, took the fever, of which the latter died; and that from this circumstance we are justified in concluding that the poison was generated in the hold of the vessel. These men were attacked some days *after* the disease had broken out in the vicinity; the mate on the 21st of July, and the captain on the 23d. They were not the first cases, as would probably have happened had the poison issued from the hold. They were, while attending to their duties and sleeping on board, exposed to the exhalations from the same local sources of infection which were exercising their baneful influence over the people of the neighborhood. Indeed, they were more exposed than the generality of others who were attacked during the season, for, like some of the other early cases, they slept on board, and consequently in the focus of the local infection; and it is well known that malarial exhalations are more active and dangerous at night, and are especially liable to affect individuals exposed to them during the state of sleep.

Nor can we attach much importance to the circumstance that two of the early cases were those of the captain of a vessel lying in Lombard Street dock, next above the pier where the Mandarin

discharged her cargo, and of the mate of another vessel close by, and that subsequently other cases occurred among the men employed in the first-mentioned vessel. There is no proof that these took the disease from the poison issuing from the Mandarin, any more than from a morbific agent originating, as it has on former occasions, along the wharves. While they were falling sick above the place where that barque lay, others were sickening below, and without approaching the latter. In visitations of the yellow fever in this city and elsewhere, the local sources of infection, though at first circumscribed within rather narrow bounds, have seldom been found to remain so beyond a limited period. They soon cover a surface of a few hundred feet, and do not attain their full limits until some time has elapsed. We may very well understand, then, that cases can have occurred almost simultaneously at South and Lombard Street wharves, without being obliged to attribute some or all of them to the Mandarin. Even if we suppose the cause to have been limited to South Street wharf, where, as we have seen, the first cases and several of the succeeding ones presented themselves, we can be at no great loss to account for the cases on board the Mandarin and neighboring vessels; for we are told, that the captain of the former, though sleeping on board of his vessel, took his meals at the Champion House, near the northwest corner of South Street and Delaware Avenue; and it is not improbable, that he as well as the other men who sickened close by, visited that same locality, and that they all perambulated the wharves at night. Captains, mates, and sailors of merchant vessels are not proverbial for their sedentary habits, and when their day's work is over are little apt to seclude themselves within the precinct of their vessel.

To this I may add that little support is afforded to the opinion respecting the agency of the Mandarin in introducing the disease, by the facts that an individual from the country, who had visited the Avenue on Thursday and Friday evenings (21st and 22d of July), and sat for an hour or more on the wharf at Almond Street, where that vessel lay, took the disease on the 23d, and that the captain of the brig Reform, lying on the north side of the pier above Almond Street wharf, where the Mandarin lay last, shared the same fate on the 26th; for, independently of the little probability of these persons be-

ing morbidly affected by a poison issuing from a vessel which, from the day she left Almond Street wharf (on the 26th), was fully exonerated from the charge of having done any injury to a single one of the many individuals who worked, ate, and slept on board, we find that other individuals, about the same time, took the disease in places remote from the vessel, and without having been known to approach her. Thus, for example, Honora Stanton, who resided at No. 16 Little Water Street, above South, some four or five hundred feet from Almond Street wharf, was taken sick on Friday the 22d, and died on the 27th. If cases could occur at a distance from the vessel, and if, amid the large number of individuals who approached her during the time she lay at Almond Street wharf, only two took the disease, and if, besides, after she left that wharf no one sickened on board, we run very little risk in expressing a doubt as to her agency in the production of the two cases in question. The same causes that gave rise to those at a distance can well be considered sufficient to have occasioned those that occurred near Almond Street wharf, without referring the effect to a vessel, the infection of which is, to say the least, very problematical.

In addition, let it be here remarked that, when the limber planks of the Mandarin were removed, no mud or other collection of filth was found concealed there. The hold of the vessel had, it is true, often been, as the captain admitted, in a foul condition. It is true, also, that when the cargo was out of the vessel it was noticed that a very offensive smell proceeded from the hold; that after she dropped down to Almond Street wharf, the stench became intolerable, especially when the pumps agitated the bilge-water contained under the limber planks. And we are told, moreover, that in consequence of some defect in the pumps and of her being a tight vessel, the bilge-water could not easily be discharged, and as a consequence soon acquired a disagreeable smell. But all this does not necessarily make a sickly vessel, except under peculiar circumstances, and when carried to a greater excess than appears to have been the case in the instance of the Mandarin. All vessels that carry cargoes of sugar and molasses are more or less foul, for the time being at least, and there are few of them whose bilge-water does not emit an offensive smell, sometimes an intolerable stench; and yet comparatively few become laboratories of febrific

poison. Indeed, although under particular conditions of atmosphere, and in particular latitudes, foul ships are very apt to be unhealthy, they are far from being necessarily so. Nor is it less true that a condition of bilge-water, such as is stated in reference to the Mandarin, however often connected with the manifestation of disease, is not always so; cases having been adduced in which the foulest and most offensive water has proved innocuous; while disease has raged where the odor was hardly, if at all, perceptible.

I may further call attention to the circumstance that the period at which the first reported cases occurred must on reflection prove an obstacle to the idea of tracing the disease to the Mandarin. It must be remembered that this vessel reached South Street wharf on the evening of the 13th July; that she was removed to Lombard Street wharf on the 16th; that she there discharged her cargo and was removed to Almond Street on the 20th. It is not presumable, that before the vessel had reached Lombard Street, and the cargo had been discharged, the poison was lurking about her decks, cabin, forecastle, or longboat. Such things seldom occur even in ships more fully saturated than the Mandarin could possibly have been. Besides, the captain and mate, who, as experience showed, were not proof against infection, as well as the eight seamen who manned the barque, had been living on that deck, and in that cabin, forecastle, &c. with perfect impunity. The first cases, therefore, if they took the disease from the exhalations issuing from the vessel, did not and could not have done so while she was lying at South Street wharf. The effect must have been produced when the hatches were opened, the cargo discharged, and the hold exposed. Dr. Jewell himself acknowledges the fact; for he remarks that "there appears to have been no cause for alarm until the cargo was out of the vessel, when it was noticed that a very offensive smell proceeded from her hold." Now, if we bear in mind that the operation of unloading did not commence before the 16th—the day the vessel was hauled up to Lombard Street wharf—and could not have been effected in less than twenty-four or thirty-six hours, we shall perceive that the morbid effluvium, supposed to have been generated under the limber planks of the hold from the putrescent state of the bilge-water, and which heretofore had there remained in a latent state, could not have had "an opportunity

(acted upon by certain exciting causes, as heat and moisture) to disseminate itself," and poison the atmosphere in the immediate neighborhood of the place where the barque lay, before the evening of the 17th. If, with this fact before us, we turn to the date of the early cases, we shall find that the first occurred on the 19th, some thirty-six or forty hours only after the poison began to escape. On the next day, 20th, we have five cases. On the 21st, five more occurred. Here, then, we have an incubation of thirty-six or forty hours at most in one case; an incubation of sixty to sixty-five in five cases, and an incubation of from eighty-four to ninety in five more. The occurrence will appear improbable to those who have paid some attention to the subject, especially if they take into consideration the circumstance that the poison, which is supposed to have so quickly stricken down individuals situated at a greater or less distance from the vessel, was powerless as regards those employed in discharging the cargo, and who consequently were most exposed to its morbific effects. Such instances of short incubation are rarely encountered. Cases of course occur shortly after exposure—sometimes a few hours, or a day or two. They are mentioned in many works on the fever, and I have myself, in a recent publication, referred to several of a striking character. They are, however, generally observed only in places where the atmosphere is fully saturated with the poison, and in times of violent and wide-spreading epidemics. But, even under such circumstances, they are comparatively unfrequent and exceptional. More generally the process of incubation is of longer duration, requiring, according to some writers, from three to eight days, and in the opinion of the greater number, from five to ten. It has extended to three or more weeks, or to several months. Now it would be a rather extraordinary circumstance that, in the epidemic of last season, we should have had, at the outset, and in such rapid succession, so large a number of instances of unusually short incubations, and that the disease should have attacked the first sufferer about a day and a half only after the poison could possibly have reached him, and the very next five only at the most twenty-four hours later. More consonant with our former knowledge on the subject, backed by what has been adduced against the supposition of the Mandarin having been the efficient agent in introducing the disease among us, is it to

conclude that the individuals thus attacked had imbibed a poison generated elsewhere than in the ship, and which floated in the atmosphere of localities where the disease broke out and prevailed before the cargo was discharged.

That causes capable of producing the effect, and similar to those which have again and again occasioned the yellow fever without the agency of a really or supposed infected vessel, existed in those localities, will not be denied by any one who inquired into the subject at the time. "The docks along the Delaware line, between Lombard and Almond Streets," says Dr. Jewell (writing in September), "as usual contain large accumulations of offensive mud and other filth." "In addition," continues the same writer, "to the prevalence of the morbific atmosphere which we have clearly shown developed itself on board the Mandarin, but not until her cargo was discharged, and which so sensibly affected individuals on approaching her when she lay at Almond Street wharf, we must not for a moment conceal the existing causes in the immediate vicinity of South Street wharf, sufficient to justify the supposition of their agency in the development of disease of a malignant type, when subjected to the high thermometrical influence which prevailed throughout the months of June and July. Not the least mischievous of these causes, in the production of an unhealthy atmosphere, was the outlet of the sewer into the dock at South Street Ferry, belching forth continually putrid masses of animal and vegetable filth accumulating around its mouth, and exposed at low water to the rays of the sun, exhaling streams of unwholesome and poisonous gases into the surrounding air. Besides this agent, there was a most foul wharf at the upper side of South Street; a filthy avenue between Lombard and South Streets, without any properly constructed surface drainage; numerous damp confined cellars, subject to an occasional overflow by the ebbing and flowing of the tide-water of the Delaware, and various minor causes that might properly be added to the above category, fruitful in the production of atmospherical changes injurious to health."

At a still later period (October 5), Dr. Jewell reverts to the subject, and after taking some pains to show that the disease was not sustained by an overcrowded population, he remarks: "The whole neighborhood, however, may be considered as favorable to the production and nourishment of malarious fevers, in view of

its proximity to the river docks, the open sewer at South Street wharf, the damp cellars, filthy alleys, and other local causes of disease, under such a long-continued high thermometrical atmosphere, as prevailed during the months of July, August, and September. That of July being 77.14 degrees, about two degrees above the average mean for many years; August, 76.76, or nearly four degrees above the common average for that month, according to Dr. Swift's review of the weather, published in the *Medical News*."

Such accumulations of organic refuse, I repeat, have often, when located in places of the kind particularly, and when aided by certain thermometrical and hygrometrical conditions of the atmosphere, proved the source of the evolution of the yellow fever poison. To no other cause could our epidemics of 1805 and 1819 be ascribed; for there was not, at those two seasons, the most remote possibility of the disease being imported in any shape or form whatsoever. In the former, no vessel, likely to have rendered us this poor service, and exonerated our city from the dishonor of being "the parent of such a pestilence," had approached nearer than the Lazaretto; and it is well known that, when, in 1819, the disease broke out in the ferry tavern, on the upper side of Market Street, and in the contiguous buildings, there was not, nor had been from the commencement of quarantine, any vessel near them from the West Indies or any sickly port. Let it be remarked that, on those occasions, as indeed at every other return of the disease among us, the fact of its non-contagiousness was as satisfactorily made out as it was during the past season. Were it necessary, hundreds of instances, which have occurred in other portions of temperate regions, might be adduced to show the local origin of the yellow fever from causes of the kind mentioned, and its independence of any exotic or imported poison. And the most strenuous and ultra advocate of importation in this city and everywhere else, must acknowledge that, in the West Indies and on the coast of Africa, the disease is due to exhalations issuing from localities very similar to those to which we have for years past been disposed to attribute its origin here. During this very last summer, eight cases of what I would consider well-marked yellow fever, occurred in Brandywine Village, which were indubitably the result of local causes. Instances in large numbers are on record of the

disease breaking out and prevailing more or less extensively on shipboard under circumstances which leave no doubt as to its local origin there. Nor are such cases limited to vessels from the West Indies or the coast of Africa. They have shown themselves in some from cold climates, where they could not possibly have imbibed the seeds of the disease. They have occurred in port or at sea, during a cruise or passage, and far from any contaminating spot. It has not unfrequently happened, that while a vessel is severely visited by the fever, others situated near it in port, or at sea, or on the same cruising ground, have remained uninjured. The very poison said to have existed on board of the Mandarin, is admitted to have been elaborated in her hold out of materials of the kind mentioned. And surely, if such has been the case in all the instances referred to, we cannot see why they may not be regarded as capable by themselves of having produced the effect in question last year on our wharves, especially when we bear in mind the atmospheric peculiarities of the season, and the great tendency manifested in most places south of this city and in tropical regions generally to the development of the disease. They certainly existed in greater excess there than under the limber planks and in the hold of that vessel; and, if the foulness of the latter can be supposed to have been the source of the febrile poison, it remains to show why the foulness on shore could not have given rise to a like effect.

It is no argument against the local domestic origin of the yellow fever, and in support of the introduction of the poison through the agency of the Mandarin, to say that the disease broke out immediately abreast of the wharf where she first hauled to, and that, although there existed in the vicinity sources of morbid exhalations well calculated to produce the disease, there were "plague spots" in other parts of our city, remote from South Street wharf, where, had the question been asked, we should, as Dr. Jewell thinks, have unhesitatingly located the first appearance of a focus of infection, competent to exercise its morbific influence on an atmosphere already tainted; and, consequently, that from the absence of fever in those "plague spots," we may infer it would not have appeared at South Street wharf had not the Mandarin diffused its latent poison there. If the argument is valid as regards the last epidemic, it must be equally so as regards all other

epidemics here, and in many other places in this country, in Europe, and even in tropical regions. If the local domestic origin of yellow fever is to be denied or doubted on the ground that there are "plague spots" at a greater or less distance from the infected locality, which, although more foul than the latter, have nevertheless remained free from sickness, there will be some difficulty in ever connecting, as effect and cause, the appearance of the disease with the exhalations from the localities where it happens to show itself. In the yellow fever epidemics of this city—and the same remark is applicable to those of other American cities and of Europe—the localities infected seldom cover more than a limited surface, and it is almost always found that, while the disease prevails in those localities alone, other places no better off in point of cleanliness, where the olfactory nerves are, perhaps, more offended by nasty smells than in the former, remain healthy. This is the case even when such "plague spots" are situate along the wharves or in the immediate vicinity. I cannot recall to mind more than a few epidemics in which the fever has prevailed over the entire extent of the river side or port, while the exemption is almost sure to occur when those spots are located afar from the wharves and in the heart of the invaded city. In 1805, when, as already stated, no means by which the fever could be introduced through infected ships was discovered, the sickness prevailed in Southwark, and nowhere else. In 1819, it broke out at the foot of Market Street, with one case in Front, near Chestnut, and some near Swanson Street and Huddle's Alley. On that occasion also it could not be traced to a vessel. In both instances it was strictly of local domestic origin, and yet at each time there existed about town and along the docks and wharves plenty of "plague spots," where, *à priori*, the fever might have been anticipated to originate and spread, but where, nevertheless, it did not show itself. Why it is so we may not find it easy to explain; nor is it necessary that I should endeavor here to solve the difficulty. It is sufficient for our present purposes to know that such is the fact, in order to show that the absence of yellow fever in some plague spots is no proof of the disease not originating from emanations issuing from other spots of the kind, and of its requiring for its production the agency of a foul vessel.

Let it be remarked that, though the greater number of the cases

which prevailed during the season, from the 19th of July to the middle of October, in the vicinity of the wharf where it originally broke out, and where it is supposed the Mandarin introduced and left the poison which contaminated the atmosphere, the disease showed itself at a considerable distance from the place and without the possibility of its being traced there directly or indirectly. Dr. Jewell, in that part of his essay which was read before the College on the 7th of September, gives us an account of forty-four cases that had up to that period appeared. Of these, thirty-seven were traced directly to the infected district. In four, the origin was doubtful; and in three, no clew could be had as to where the disease was contracted. In other words, they could not be shown then, and cannot be proved now, to have taken the disease in the infected district, properly so-called, *i. e.* within a short distance of where the Mandarin had lain; while they sickened too far from that district to permit us to think that the air contaminated by the vessel could have reached, especially as we find that it did no injury to the intervening population. In his last communication (Oct. 5), Dr. Jewell states that the whole number of cases registered had amounted to 170. Of these, 147 were traced directly to the infected district; 22 were of doubtful or unknown origin, and one contracted the fever elsewhere. Of these 22, three occurred in September, in the upper part of the city, fully a mile and a half north of South Street, but not far from the Delaware front. The history of the first of these three cases could not be ascertained; but there is no reason to suppose the patient had approached the infected district. He resided in north Front, near Callowhill. The subject of the second case, was the wife of the first. "This woman declared that, so far from visiting the vicinity of South Street, she had not even crossed the threshold of her own door for several weeks, having a family of small children around her. The room she occupied, the third story front of an unfinished warehouse, was very filthy, but large, and by no means confined. The whole upper part of the building was rented out, in rooms, to different families of the low order of Irish, everything around presenting poverty, rags, and filth." The subject of the third case resided about one square north of the preceding, in Willow Street, two doors west of Front. The individual, as we are told, "unhesitatingly declared that he was not acquainted with the lower part of

the city, did not know that he had ever been in the vicinity of South Street wharf; was a shoemaker, worked in Front Street above Noble, and was not in the habit of going anywhere else, but from his shop to his residence in Willow Street."

Here we have cases of unmistakable yellow fever arising far from the infected district, and in a locality where the atmosphere supposed to have been contaminated by a poison derived from the Mandarin could not have penetrated. Dr. Jewell, it is true, speaks of "an epidemic influence stealthily creeping along the wharves from the infected district, and which lent assistance to other causes in exercising a morbific agency on the individuals in question." But he will have some difficulty in making us understand how an epidemic influence (the nature of which, by the way, he does not explain) could have travelled the distance of a mile and a half, and, in its transit, passing over hundreds of vessels, and thousands of people, without influencing any but three individuals residing at the end of its journey. More natural will it be—more consonant with the result of experience here and elsewhere—to conclude that the disease arose, in the instances above mentioned, from the action of a local febrile poison, and, setting aside the aforesaid mischievous intruder from South Street, join with Dr. Jewell in the opinion that the effect was due to a residence, on the part of the individuals seized, "in the immediate vicinity of Willow Street wharf, where the culvert along Pegg's Run empties into the Delaware, which outlet, at low tide, is fully exposed, and where at all times there is a large deposit of putrefying vegetable and animal remains, and that, from the decomposition of these remains there arose 'a miasmatic constitution of the atmosphere,' 'from the inhalation of which those individuals contracted the fever, resulting in the death of two of them.'" Surely to those who know what the results of the exposure of such remains to the action of a powerful sun commonly are—especially during a summer season such as that through which we passed last year, with an average several degrees higher than usual—the sickness of the individuals mentioned will not appear difficult to explain, without having recourse to an epidemic influence stealthily creeping along the wharves, and whose existence is founded on purely hypothetical grounds.

Of course, some will feel inclined to say that, in the supposition

of the cases in question having arisen from the action of the local causes mentioned, it is difficult to understand how the disease, instead of spreading, should have been so restricted as to attack only three individuals, and leave the rest of a large population unscathed. To this it may be answered, that in every place where the yellow fever makes its appearance epidemically—whether it be in this or other cities—many more escape than are attacked, except in times of violent and wide-spreading visitations; that in the instances before us, the cases occurred towards the latter end of September, and but a few days before the occurrence of frost, or cold weather;—therefore, shortly before the close of the epidemic—and when, consequently, the disease had but little chance of spreading; and that, explain them as we may, such instances of the limitation of the disease to a few cases, even in instances when its local origin cannot be doubted, are of rather frequent occurrence. Sporadic cases of yellow fever in various cities and towns subject to the disease, have been noted from time immemorial. In some places, indeed, they occur almost annually, between periods of epidemics. Nay, I could, if necessary, show that, in localities where the fever has never or seldom assumed the epidemic character, sporadic cases are not unknown. Now sporadic cases are as surely the effect of a poison evolved from local sources of infection, as those that occur in epidemic seasons; and, if we admit this, we can very well admit, also, that the disease which broke out last year in the northern part of this city, towards the close of September—though affecting but three individuals out of a population of many thousands—may have been just as well the result of a poison exhaled from local sources of infection, as if it had spread to a large number, or invaded the entire district.

It may be remarked, before closing this branch of the subject, that instances of the sudden appearance in epidemic seasons, of cases of the disease at a more or less considerable distance from the infected district, without the possibility of tracing them to exposure to the tainted atmosphere of the latter, are not unknown. Those of us who witnessed the epidemic of 1820 must remember, that after the disease had prevailed for some time in the parts originally and principally affected—first about Race Street wharf, and subsequently and mainly about the foot of Walnut Street and the vicinity—and when it was there on the decline, it sud-

denly broke out, on the 18th of October, in the Northern Liberties, a mile or more from Walnut Street. The cases were twelve in number, of whom eleven died. They could not in any way be referred to the morbific agency of the atmosphere of the localities where the disease had before been prevailing, and were satisfactorily traced to exhalations issuing from Pegg's Run, which at that period was unculverted, and received the contents of the gutters of numerous streets and alleys, as also of two culverts, and the offals of several glue, starch, dressed skin, and soap manufactories, of slaughter-houses, privies, &c.

It is scarcely necessary to remark, that cases of this kind, as well as the outbreak of the disease in ports which before had been, for a longer or shorter space of time, healthy, offer no difficulty to the advocates of importation. If they do not explain the former in the way suggested by Dr. Jewell, *i. e.* by the assistance of an "epidemic influence" creeping stealthily from the original seat of the imported pestilence, they do so by pointing out, or stating it as very probable, that some one from the infected district has visited the place where the mysterious cases present themselves, and left there the seeds of the future sickness; or they show, that a case of real or supposed yellow fever, caught in a sickly place, had occurred in the neighborhood months before, and there left the foundation for the subsequent development of the disease. It matters not what interval of time has elapsed between the supposed introduction of the poison and the advent of the new cases, or whether the disease has broken out in the house where the original case had occurred, or at a distance. As regards the unexpected outbreak of the fever in a place heretofore healthy, some vessel can generally be found to explain the occurrence, or some luckless individual, or trunk of soiled clothes, or box of merchandise, is sure to have arrived from an infected spot. At all outbreaks of the disease in any locality, it is possible to discover that some one has arrived there with or without sickness, a few days, weeks, or months before, from an infected or suspicious spot, or after having communicated directly or indirectly with one who had been so exposed. Nor is it an uncommon thing for a vessel from southern or West Indian ports to arrive here or in other places within the yellow fever zone, during the summer season with more or less foulness in her hold, or with bilge-water of no

great purity. In the first case, the luckless traveller is easily convicted of having conveyed the poison; and in the other, as the fever, when it appears, usually does so along the wharves, it cannot be difficult to trace some connection, apparent or real, between the arrival of the vessel and the advent of the fever. But the etiological inquirer cannot rest satisfied with proofs of this kind. Something more is required to give foundation to the creed of importation, especially when we take into account the extraordinary nature of some of the facts adduced in evidence of it. For on examination, we shall find that the advocates of this creed not only care little about the time which elapses between the supposed introduction of the poison and the manifestation of the fever, but are not usually very particular as regards the place whence that poison proceeds. A few specimens may not be inappropriately referred to in this place. In 1843, the yellow fever invaded a portion of Charleston Neck. Dr. Hume explains the occurrence by the arrival there, from the Havana, of an individual sick with fever *six weeks before*, and who, if he communicated the disease at all, did so, not to any one in the house where he lodged, but to two Dutchmen, who resided on the opposite side of the street. The same writer tells us, that Charleston was preserved last year from the yellow fever by the energetic measures adopted by the Board of Health; and, in proof of this, cites the following facts: "Captain P——, of the Ellen Goldsborough, arrived from Baltimore on the 30th of August; sickened on the 4th of September, was sent to the Marine Hospital on the 6th, was declared to have yellow fever, and on the 7th was at the Lazaretto, where he died on the 10th. On the 23d of September, Captain P——, of the Berkelew, was reported under similar circumstances, and was immediately sent to the Lazaretto, where he also died. Thus ended both attempts at invasion."

Nothing is said to show that the vessels in question were infected, and that the individuals took the disease on board. We are not told whether the Berkelew had arrived from a sickly port; but in reference to the Ellen Goldsborough, we know that she could not have brought the disease concealed in the body of the captain, inasmuch as no yellow fever existed in Baltimore at the time of her departure. We certainly have no proof, then, that the fever in these cases originated in the vessels in question, for

no one else was taken sick on board before or after their arrival. We are positively sure, that in one at least it could not have been derived, in any shape or form whatsoever, from the port whence the vessel came. Why, then, are not these considered in the light of sporadic cases, which Dr. Hume himself, like every one else, acknowledges to occur at Charleston, as they do elsewhere, and are of course of domestic origin? And why refer them to importation, seeing especially that they presented one of the peculiarities which Dr. Hume thinks characterize sporadic cases, that *they did not extend and infect localities?* The fever of Bahia, in Brazil, was by many attributed to an arrival from Baltimore, where fever did not prevail that season. By others it was satisfactorily traced to a vessel which had arrived from Canada! Others, again, thought it came in a vessel from New Orleans, forgetting that this vessel had left the United States in the winter season. The fever of Rio Janeiro commenced in February, 1850, on board a vessel from this city, and soon spread in other ships and on shore. Of course, this vessel was confidently looked upon as having introduced the disease, though it left here in the winter, and it never had any sickness on board till after it arrived at Rio. We have the high authority of Pariset for the fact, that the epidemic of Cadiz, in 1819, came direct from Calcutta. True it is, that the yellow fever poison is not generated at Calcutta, or, at any rate, that the disease did not exist there in 1819; it is true, also, that during the passage from Calcutta to Cadiz there was no sick on board. But what of that? If there was no yellow fever there, cholera prevailed extensively; and, according to the eloquent Frenchman, a disease which in India is cholera, and not contagious, may be converted into a contagious yellow fever when transplanted into Spain by healthy men in a healthy ship; and, in proof of the importation on that memorable occasion, he remarks: "That the offending vessel arrived at Cadiz on the 26th of June, and the yellow fever made its appearance on the 29th of July—*only* thirty-three days after—that those with whom the mate and two of the sailors lodged died, and that these men soon after met with a similar fate."

As is well known, the yellow fever prevailed most extensively and fatally in Cadiz and other cities of Andalusia, in 1800. On this occasion, as in almost every other, the disease was referred

to the importation of the poison from abroad, by Arejula, Gonzales, and other Spanish physicians, as also by Sir James Fellowes, Berthe, Blane, Pym, Bally, Palloni, Strobell, Pariset, Francis, Carpenter, and other English, French, Italian, and American writers. By the government the cause of importation and contagion was also warmly espoused; and when an intelligent and meritorious Spanish writer, Don R. Arnesto, boldly affirmed, and undertook to prove, the erroneousness of these views, the sale of his work was prohibited; it was publicly burned by the hands of the hangman, and the writer was obliged to make *amende honorable*, in other words, to retract his opinion. The disease was supposed to have been introduced by the Ship Dolphin, of Baltimore. This vessel was chartered at the Havana, to convey to Spain the Intendent of Cuba, his family, and attendants. She left the Havana on the 27th of May, touched at Charleston on the 2d of June, left there on the 10th, and anchored in the Bay of Cadiz on the 6th of July, after having lost three men during the passage. The disease broke out in August. But it was proved that these men had not died of yellow fever; that this disease did not prevail at the Havana at the time of departure of the vessel; that no yellow fever prevailed in Charleston, that year, prior to the 20th of June, ten days after the departure of the Dolphin; that cases of the disease had appeared at Seville and Xeres before it broke out in Cadiz, and that, in the latter city itself, cases had been noticed prior to the arrival of the Dolphin.

I am aware that Philadelphia is not the only place where the yellow fever was lately said to have been introduced in the way mentioned. The advocates of the doctrine of importation dwell with complacency on the present tendency among physicians to attribute the origin of the outbreaks of the disease which have taken place in various parts of the country, during the last summer, to communications, direct or indirect, with infected places or vessels. They point to the fact that the disease has prevailed, with unprecented fatality, in New Orleans, and extended its ravages to Mobile, Natchez, Vicksburg, Grand Gulf, Montgomery, &c.; that it has prevailed also in the smaller towns on the Louisiana lakes, around the large cities along the Mississippi River, and the streams tributary to the bays, and even has invaded several plantations where it had never reached before; and they refer to the cir-

cumstance that, in all the localities thus visited by the fever, not a few physicians—men of talent, judgment, and reputable professional standing—are found who refer those occurrences to the arrival, or momentary stay, in or near, of a vessel or steamboat from some infected place, containing individuals laboring under or convalescent from, the fever, or simply impregnated with the poison; to a box of merchandise, a trunk of clothes, and the like.

The disastrous epidemic of New Orleans is particularly proclaimed as the undoubted effect of importation, and a strong effort is being made to obtain the enactment of stringent quarantine regulations, with a view of shielding the community from a repetition of such calamities. And yet we find that the first cases occured in unacclimated persons, who had just arrived from Europe, and come over in vessels direct from Bremen and Liverpool, without stopping at any place where yellow fever was prevailing; that no vessel that arrived in New Orleans from an infected port, whether in South America or the West Indies, brought any cases of yellow fever, had any on board while in port, or gave rise to any, previous to those which must have originated in the city; that within a very few days after the occurrence of the first cases, others were seen in different and remote places, having no visible sort of connection or intercommunication, and that shortly afterwards the disease broke out in still more remote and separate localities, under like circumstances.

As regards the events which have occurred in the other localities mentioned, I can have no hesitation in stating, after an attentive perusal of all I have been able to collect on the subject, that the facts stated are far from satisfying my mind on the score of importation, especially as I find that, in places within the yellow fever zone, steamboats from infected regions have arrived, landed merchandise, clothes, passengers, and individuals laboring under the fever in its most aggravated form, without producing the evils in question; and, on the other hand, that the disease has broken out in localities where it had never manifested itself before, without its being possible to trace it to importation. We have seen that the cases which occurred in the village of Brandywine, could in no way be ascribed to an exotic origin. The poison was not brought there by a steamboat or otherwise. It was elaborated on the spot.

Who can say that the disease would not have occurred, in the same way, in the villages and towns along the Mississippi and the lakes, had no steamer arrived or stopped there. Again, at Memphis, which is as much within the yellow fever zone as Philadelphia, no quarantine regulations were adopted; no special sanitary regulations were instituted with the view of preventing an incursion of the epidemic. Boats freighted with merchandise, saturated with the atmosphere of New Orleans and other infected towns, landed at the wharf almost every day; a number of persons affected with the disease were carried through the streets to the hospital—many dying there, and some in private families, and yet no sickness was communicated to nurses, friends, or physicians, or to the public at large.

It must be evident that if facts of the kind mentioned are viewed in the light of satisfactory proofs of importation, the advocates of local origin have no chance of success. They must haul down their flag and surrender at discretion. During the period at which yellow fever usually prevails, vessels daily arrive at the seaports of this and other countries within the yellow fever zone, from other ports within or without the same limits. Now, if the first cases happen to appear in or near a foul vessel, the disease will surely be attributed to a poison brought in her; and it matters not whether the vessel proceed from an infected or a healthy spot, or from one where the disease sometimes prevails or never has prevailed; a case of importation may always be easily made out, and the opponents of the creed will be effectually silenced.

This effect would be more effectually obtained were we to acquiesce in the validity of such arguments as these: "That Charleston is beyond the northern limit of self-generating epidemic yellow fever," says Dr. Hume, "is exceedingly probable, for it is the property of epidemics never to die in the places of their nativity. Yellow Fever does die in our climate, for it is not renewed each successive summer; while at the Havana it flourishes in perpetuity. If the fever is not a native of the West Indies, it is, at least, naturalized; but it cannot be said to be naturalized in Charleston. Our winters extinguish it effectually. Charleston does, occasionally, produce sporadic cases of fever, of domestic origin, but they do not extend nor infest localities;" and after describing a

case of the kind, Dr. Hume adds: "Had he obtained his disease from an infected West Indian vessel, the result and consequences would have been very different."

Fortunately for the advocates of the local origin of the fever, these arguments are open to serious objections. No reason can be assigned for believing that, did the fever spread in the way supposed by importationists, individuals laboring under a sporadic attack arising, without doubt, from local causes, would not tend to produce the effect just as well as those who have been on board or near a West Indian vessel. In this and other cities, individuals from tropical regions have often arrived with the disease on them, or have sickened and died after their arrival, and although not sent to a lazaretto, have not been instrumental in creating an epidemic. Connection with the West Indies, or an infected West Indian vessel, is not sufficient to impart to individuals the power of disseminating the disease. The same immunity has followed when the vessel in which the accused individuals arrived was itself the focus of infection. They have landed—they have been admitted in public establishments, or private houses, and there treated, nursed, and recovered or died, with perfect safety to all around.

If in any season a few cases only happen to arise, they are admitted to be the effect of local cause; if the disease spreads, and some one can be found who has communicated, directly or indirectly, with a suspicious vessel, then local causes are no longer thought of, except as adjuvants, and the disease is referred to his agency. When we bear in mind that the yellow fever is the same, whether it assumes the sporadic or the epidemic form; that cases of the former kind—the sporadic—which are admitted to arise from local causes, are characterized by the very same phenomena as those supposed to be due to an exotic poison, and must be propagated in the same way; that cases traced to the West Indies or an infected vessel, do not necessarily spread the disease, and, on the other hand, that epidemics occur under circumstances which forbid the idea of any connection with infected places or ships, it must be evident that this branch of the argument is not entitled to much attention.

Nor can we attach much weight to that branch of it which has reference to the supposed property of epidemics never dying in

the places of their nativity, as contrasted with the want of renewal of the disease in Charleston and other parts of this country; for, however true it may be that the yellow fever is extinguished by the cold of winter, and conceding, if necessary, that at the Havana it flourishes in perpetuity, a statement which admits of some doubt, it is very far from certain that in tropical climates the fever prevails to any extent annually. The following facts will disprove the allegation: "At Vera Cruz, the city was free from 1776 to 1794. If we except Sir W. Pym, and a few others of the same school, physicians who are conversant with the yellow fever of the West Indies, whether they be contingent or absolute contagionists, or anti-contagionists, have, from the days of Towne and Desportes to our own, admitted and continue to admit, that the disease, such as it exists there, is a native of the soil, and prevails more frequently than anywhere else. And yet, there is not one among them who does not know that the fever is not of annual occurrence in those islands. Sporadic cases doubtless occur frequently during some seasons. At others, however, they are seldom seen, and at some again they are almost, if not altogether, unknown. If we open Desportes's excellent work on the Diseases of St. Domingo, we shall find that, in the course of the fourteen years he resided at the Cape, the place was free from the fever during five. At Martinique, yellow fever did not appear from 1827 to 1838. Grenada, when visited in 1793 by the epidemic, described by Chisholm, had not suffered for 31 years. Dominica was also exempt from 1817, 1821 to 1838. Georgetown, Demarara, suffered severely in 1793; next, in 1803; then in 1819. From that year to 1837, the disease did not show itself in the epidemic, if indeed in any form."[1] At Antigua, up to June, 1816, "no epidemic of any description had made its appearance for a very considerable lapse of time either among the white or colored inhabitants." "A few sporadic cases of fever were undoubtedly met with at intervals; but these were not fatal."[2]

If, with what I have said of the non-transmissibility of the yellow fever under the most favorable circumstances, we admit as well founded the views of those who contend for the importa-

[1] Pneumonia and Autumnal Fevers, p. 80.

[2] Musgrave, Med.-Chir. Trans. ix. p. 94.

tion of the disease here and elsewhere, last summer, and at many other times, we cannot but be struck with the difference of the results. In some cases, the disease arises evidently from local causes; and whether it so arises, or is introduced from afar, does not spread beyond the focus of infection; in others, it is imported in some way or other, and soon after spreads and may be transmitted far and wide by the sick, clothes, merchandise, and other kindred means. How to reconcile the discrepancy I know not, unless by recognizing the existence of *two* yellow fever poisons, the one producing the usual characteristic phenomena of the disease, and—obstinately refusing to be conveyed from place to place through means of the sick or fomites—restricting its morbid effects exclusively to the localities where it originates; the other producing the very same phenomena as the former, but, unlike it, endowed with the power of being conveyed in a variety of ways from the place of its origin, and spreading with greater or less rapidity; sometimes, as it is stated to have done at Boa Vista in 1845, and in some of our Southern States last summer, like wildfire!

To the various reasons I have thus far assigned for opposing the belief that the Mandarin was instrumental in introducing the disease among us, I must add a few more. It is stated, and several times repeated, by Dr. Jewell, that, as far as has been ascertained—and the strictest inquiry, we are told, was instituted by Dr. Gilbert, the port physician—there was no development of disease of a malignant type in the vicinity of where this vessel lay, either before or during the time of discharging her cargo. In another place, Dr. Jewell remarks: "Before the arrival of the Mandarin, and up to the 19th of July, the day on which the first case of fever occurred, the vicinity of South Street and the wharf, as well as the entire city, enjoyed its usual degree of health. Certain it is, that no epidemic existed." Now, as regards the correctness of the last statement there can be no difference of opinion; for there certainly prevailed no epidemic on or about South Street wharf prior to the date mentioned, and, at no time was there anything of the sort in the city at large. We must also admit that, anterior to the 19th of July, cases of fever deserving the name of malignant or yellow, were not reported as such to the Board of Health, and must have been few in number. But that the case of the 19th was the first that occurred, may admit of some doubt.

Indeed, I have reason to believe that such was not the fact, and that, some time prior to the 19th, cases did occur which exhibited many of the characters of the fever about to prevail epidemically. Of one case I am positively certain. It was as well marked as any I heard of or saw during the course of the season, and as such deserves to be recorded in this place. I am indebted for an account of it to the attending physician, Dr. Keating, whose communication on the subject I transcribe in full:—

111 South Fourth Street, March 26, 1854.

My Dear Doctor: Accompanying this, you will find the notes of James Kiddell's case. I have presented them to you in a crude form. This, perhaps, may make them more valuable; for, although rough, they give a more accurate account of the condition of the patient, being noted after each visit. You will recollect my speaking to you in reference to this case, at the time of its occurrence. It struck me, from the very onset, as embracing a set of symptoms with which I was not familiar; I was anxious for you to see it, and told you, that the matters which were ejected from the stomach answered the descriptions I had read of black vomit, and that an individual boarding in the house with my patient, for some time a resident of Mexico, and perfectly familiar with yellow fever, had expressed his conviction, on viewing the matter vomited, that the disease was yellow fever.

I had no experience in this disease, and as it had not then made its appearance in the city, I could not persuade myself as to its identity with yellow fever; yet, so convinced was I that I was treating a disease which was entirely new to me, that I demanded a consultation at an early period. I have been able to ascertain, that Mr. Kiddell, previous to his illness, had been for some days on the wharf, and one of his companions told me that he thinks his duties caused him, during the week before he was attacked, to visit constantly wharves below Pine Street, *which particular ones*, however, could not be specified.

From the cases of yellow fever which I afterwards saw and treated, though at first strongly prejudiced in favor of that view which attributed the origin of the disease to the barque Mandarin, I must now own that I believe Kiddell's case to have been one of those obscure ones which precede an epidemic, when the poison, though formed or developing, is not yet in such a concentrated state as to evince its marked characteristics, and stamp itself in an indelible way upon its victims. Dr. West fully coincides in my views.

I remain truly yours, &c.

WILLIAM V. KEATING.

James Kiddell, set. 47, Englishman, a measurer of mahogany, residing Fourth and Spruce Streets. I was called to see him on the evening of Monday the 4th of July. He had been complain-

ing since the 1st, and had felt so unwell as not to attend to his regular occupation.

Symptoms when I first saw him: violent pain over the colon; intense burning in epigastrium; tongue very red and furred, rather contracted; expression of face anxious; extreme cephalalgia, slight nausea, and a constant desire to go to stool, attended with tormina and tenesmus; evacuations, when I saw them, fecal and abundant; heat of skin intense; pulse 120, hard and contracted.

Tuesday, July 5, at 9 A.M. Passed a very restless night; skin very hot; pulse increased in frequency; burning in epigastrium very much increased; tenderness over the colon almost disappeared. Has had constant recourse to the close stool, having had seven evacuations since I saw him. Passages consist now of a sero-mucus tinged with blood and semifecal matter, but abundant in quantity. Cephalalgia and anxious expression of face, and nausea increased; but with all this, the patient seems to have no uneasiness as to the result, and does not complain much of his sufferings.

Evening. Pulse and general condition same as in the morning; more flush in the face; constant vomitings of a glairy mucus, some of it having chocolate-colored grounds; stools more frequent, quite abundant, and consisting of a fluid of tarry consistence and dark purplish color resembling broken-up clots of blood; pain over the intestines, tormina and tenesmus disappeared. Says he feels better.

Wednesday, 8½ A.M. Face has the dusky flush of typhus fever; tongue red at the edges, brown and dryish in the centre; pulse very quick, not quite as strong. Has been vomiting a quantity of coffee-ground chocolate-colored fluid, and passing large masses from the bowels resembling broken clots of blood mixed with feces and mucus. Dr. West saw him with me at 12 M. on Wednesday. Continued very much in the same way until Friday morning, when all his bad symptoms apparently gave way. Got up at 10 o'clock, stood before the glass and shaved himself. On that day, Dr. West and myself considered him convalescent. But at 9 o'clock P.M. I was called in haste, when I found Mr. Kiddell vomiting large quantities of claret-colored fluid; his pulse was rapid and sinking, and he was constantly purging a dark-colored fluid. Complained of no pain; brought up the fluid from his stomach without any effort. It seemed almost a regurgitation.

Mr. K. died Saturday morning at 9 A. M., after having had two convulsive spasms. I saw him a half hour previous to his demise; he complained of no pain, and insisted that he was convalescing. His skin was now slightly jaundiced; the conjunctiva much injected; mouth filled with purple-colored sordes. A few hours after death the skin assumed a deep bronze color. A *post mortem* was refused.

This case, to say the least of it, is highly interesting. For my part, I cannot but consider it as one of yellow fever. At any rate it does not look like anything else, and certainly presents so many of the characteristic phenomena of that disease that had it occurred but a few weeks later it would not have been viewed in any other light by the most experienced physician. The dysenteric complication is far from being an unusual one, and its occurrence is not sufficient to change the diagnosis. It constituted a prominent feature in the case of Mr. Crowell, which occurred on the 16th of August, and terminated fatally with decided black vomit on the 19th. In the instance before us, we have the peculiar headache and anxious expression of countenance, the frequent and contracted pulse, so common during the stage of reaction; the intense burning of the epigastrium; the red, contracted, and furred tongue; the chocolate, claret-colored, coffee-ground discharge from the stomach; the tarry-dark, purplish, bloody stools; the jaundice, the bronzed appearance of the skin a few hours after death, and on the third and fourth day, so sudden and complete a cessation of all the bad symptoms, and so remarkable a retention or return of muscular strength as to induce the physicians to regard the disease as effectually mastered. This assemblage of phenomena, so strongly characteristic of the yellow fever, is not encountered in any other febrile affection, and I can have no doubt that, were the description of the case inserted in the same monograph with those of other cases of undeniable yellow fever, without reference to the time at which it occurred, Mr. Kiddell would not be supposed to have died of any but the genuine disease.

The conclusion will appear the more natural when we take into consideration the period of the year at which the case occurred; the high range of the thermometer at the time and for many weeks previous; the localities the patient had visited, and the circumstance that, but a few days after, many other cases, as regards the

yellow fever nature of which there can be no difference of opinion, showed themselves.

During the progress of the case, I was made acquainted with the phenomena, and I saw the body an hour or two after death. Dr. Keating recollects full well, that I expressed several times the opinion that the disease was one of a very suspicious character; that I stated that if there were cases of yellow fever in town I should feel no hesitation in reporting the one in question as of that kind, and that he had better watch it closely lest it might slip out of his hands before he was aware of danger. He recollects, too, that when I heard of the sudden and remarkable remission on the third or fourth day, and afterwards saw the body, I was still more disposed to believe he had had to deal with a case of yellow fever, and that I strongly urged the propriety of a *post-mortem* examination, when, I felt convinced, the liver, stomach, duodenum, and small intestines would be found to present the anatomical characters appertaining to that disease.

Entertaining these views, respecting the nature of the foregoing case, I can have no hesitation in regarding it as an *avant courier* of what was about to happen—as a foreshadowing of the approaching epidemic. Whether or not many cases of a similar kind, or of a more mitigated character, occurred about the same time and prior to the 19th of July, is more than I shall undertake to decide positively. But, considering that all the cases of yellow fever that ended fatally during the season, especially at the commencement, were not reported as such to the Board of Health; that the disease being new to most of the practitioners of the city, may easily have been mistaken for something else; that such may more particularly have been the result in mild cases, and that very few of those that recovered from an attack of the real disease were reported at all, we can have no certainty that the case of Mr. Kiddell forms a solitary exception to the rule, and was the only one that presented itself prior to the arrival of the Mandarin and the outbreak of the disease at South Street wharf.

Let it be observed, in addition, that doubts may be raised as to the correctness of the dates at which the attacks of some of the early cases recorded are said to have occurred. In regard to one of them, at least, some uncertainty exists; for while he is stated, on information obtained at his boarding-house, to have been

seized on the evening of the 20th, he himself—and we should suppose he knew something about the matter—affirmed at the Hospital, where he was removed, that he sickened on the 17th.

But be this as it may—whether the case of Mr. Kiddell was or was not the only one of the kind that occurred before the arrival of the Mandarin, at South Street wharf, matters little as regards the question before us; provided it be admitted, and I cannot conceive how any doubts can be entertained on the subject, that the disease of which he died was similar to that which subsequently spread epidemically, my object will be attained. In that event, the case in question must have been due to the action of the same poison which produced all the cases that appeared some days afterwards; and its occurrence early in July shows indubitably that that poison floated, to some extent, at least, in the atmosphere of the wharves prior to the arrival of the Mandarin; and that, consequently, we are to look, not to the bilge-water of that vessel, but to other sources of infection, to account for the existence of the fever among us last summer. Such foreshadowings are not uncommon. They have been noticed in many of our epidemics, and in those of other places, where it was observed that the disease commenced with a single, or a very few cases; and that after the recovery or death of these, it made a remarkable though partial pause. This pause was noticed as regards the early epidemics of this city, by Dr. Currie and Dr. Rush. It was dwelt upon in an especial manner by the late Dr. Hosack, who stated that it occurs in every visitation of the fever, and fixed its duration at from eight to twelve, or fourteen days.

Another and very strong reason for doubting, if not denying, the agency of the Mandarin in the production of the fever of last year, is derived from the circumstance that we are called upon to believe that an epidemic which lasted—as epidemics of yellow fever usually do here and in other parts of temperate regions—nearly three months, was thrust upon us by a vessel which did not remain in port more than a week after the discharge of her cargo; which is yet to be proved to have communicated the disease to a single individual who visited or worked on board of her, and which is admitted by all parties to have been perfectly innocuous after she left Almond Street. In a word, we are given to understand, that a fever which continued to prevail a very

long while after a vessel left the wharf where her cargo was discharged, was nevertheless introduced among us by that vessel. That this vessel deposited during the few hours she remained at the wharf after she was emptied, a poisonous agent of some sort, which continued to thrive and spread its baneful effects, after the departure of the instrument of its introduction; and that the latter, after making the fatal deposit, and being removed from the spot it had helped to contaminate, ceased to be itself a focus of infection. The occurrence, in so far as regards the yellow fever, does not appear to be probable, and would, if true, be in direct contradiction to the result of former experience here, and in many places where the disease has often been observed. Were the yellow fever contagious; had it, in the instance in question, manifested properties of the kind, its continuance, after the departure of the vessel which brought it, could readily be understood. The event has often been noticed, and can admit of no doubt, so far as concerns contagious complaints; but the idea of its occurring in relation to diseases of a non-contagious character, is not founded on fact, or analogies. It is at best a mere hypothesis. We know of no febrile or other poison producing a disease, of that character which is capable of giving rise to effects such as are here ascribed to the efficient cause of the yellow fever. We know of no instance in regard to any etiological phenomena whatsoever to which we may appeal as affording a plausible analogy. The yellow fever, though far from being identical with, or a mere aggravated form of ordinary malarial fevers, is nevertheless of the same family of diseases. Arising, as we have seen, from local sources of infection, it is like them a malarial fever also; and the poison by which it is produced, however varying from those which give rise to the several forms of the above-mentioned fevers, can scarcely be supposed to possess, when carried anywhere in ships or otherwise, properties very different from those with which the others are endowed. Yet nothing of the sort has been observed in regard to these. The poison of the African remittent fever—of the Chagres fever—of the remittent bilious fever of other parts of hot climates or of our own latitudes, have never been known or even supposed to produce the self-perpetuating phenomena alluded to. The same is found to be the case in relation to all kindred poisons; and, until an exception to the rule can be satisfactorily made out, we are

justified in doubting that matters take a different course in regard to the yellow fever; and we must, I repeat, view the idea under consideration in the light of a mere hypothesis.

Let it not be supposed that the family likeness existing between these fevers ceases as regards the question of contagion; for nothing can be more problematical than the contagiousness of the yellow fever, under any circumtances whatsoever. At any rate, whatever may have been the case elsewhere, or among us at other times, sure it is that during the last summer nothing, as already stated, was observed calculated to lend the most remote support to a belief in the doctrine of contagion. Hence, even had the Mandarin been undoubtedly a laboratory of the most virulent yellow fever poison, as she evidently was not; even had she been, like a number of other vessels, an account of which I have given elsewhere, a decided focus of infection, the effect would have been different; the disease would have ceased soon after she left the wharf. Such has been the result in all the cases on record—in all those in which a truly infected vessel, or perchance infected clothes or merchandise—supposing such infection possible—have been removed from the place where they had introduced the fever. I do not except the so often mentioned epidemic of Boa Vista in 1845; for, after a careful examination of all the publications that have appeared on the subject, I do not perceive any reason for connecting that event with the arrival of the Eclair in the Island. And, certainly, if I feel no disposition to believe in the agency of that ill-fated vessel in the case in question—one of the most plausible of those adduced by importationists—I can have no hesitation in rejecting the less important ones which, from time to time, have been presented to our notice. In these, as in the instance of the Eclair, the disease, which appeared and continued to prevail after the departure of the vessels, was evidently due to the agency of local causes. In all others, whatever may have been the extent and virulence of the infection on board, the fever left together with the vessel that had brought it; or, if some cases continued to appear after her departure, they soon ceased to do so, and were found to occur in individuals who had been exposed to the infection in or near her, and in whose system the poison had remained in a latent state. In all instances of infected ships the disease remains in full force on board till removed through means of

a thorough expurgation, or killed by the agency of frost. It is limited to the vessel itself, or its immediate vicinity; it does not extend beyond; and as soon as the floating local cause of infection is removed, the disease soon stops and no epidemic ensues. Such has been the case in reference to the ships Hibbert, Dasher, Pyramus, Piqua, Rattlesnake, Scout, Euriale, Levant, Peacock, Blossom, Vestal, Bedford; such has been the case also in reference to the steamers Medway, Conway, Orinoco, Magnalina, Panama, Esk, and many others it is not worth while to enumerate. All these were decidedly infected; some of them had been so for weeks or months, and were thoroughly impregnated with the poison; and yet, though they were admitted into heretofore healthy ports, under circumstances of atmosphere and localities the most favorable for the introduction of the disease, if that introduction were possible; though individuals laboring under the fever, or their effects, were landed and received into hospital wards, and the freest intercourse was allowed, no evil effect ensued. No one took the fever, unless he went on board or hovered in the vicinity. "So," as Dr. Wilson, a competent authority on such matters, remarks, "it happens, if not universally, almost universally. Nearly every man who joins a ship in such a condition has the prevalent disease sooner or later; but no number of persons taken from such a ship, laboring under the disease in any stage, or in any forced in a situation where the disease does not exist, though in a mass of healthy people, can excite it in a single instance." And we are yet to learn that, after the departure of those vessels, the disease broke out and prevailed epidemically.

Such, indeed, is the almost perfect uniformity of those results —such the possibility in most of the instances in which contrary events have taken place to account for the occurrence and continuance of the disease on different principles, and such the absence of all evident connection between the presence of the ship and the subsequent appearance of the fever, that we may conclude, without fear of contradiction, that the rule is absolute, and that the yellow fever is never and can never be introduced in the way mentioned, or that, being so introduced, it cannot, or does not continue to prevail or spread after the departure of the vessel that brought it.

To a contagionist, the continuance of the fever after the re-

moval of the supposed agent of its introduction, appears of easy explanation; for, if there happens to be on board an individual affected with the fever, or who has just passed through it, he is at once pronounced to have communicated it to some one, who in turn has imparted it to others, and in that way an epidemic is soon got up. In the absence of a fever-patient, the contagious poison is easily traced to some object which belonged to, or had come in contact with the sick, or was introduced into the vessel at some infected place, and which, after producing its morbific effect on some susceptible subject, affects, through his agency, the rest of the community long after the vessel has left the port; or again, the poison is supposed to be imprisoned in the hold, or amid the cargo of a ship or steamboat, or in the clothes of rail-road or stage passengers, and, after being deposited wherever these may stop, to be transmitted from one individual to another.

To those, however, who disbelieve or doubt the contagious character of the yellow fever, or who, without coming to any definite conclusion on the subject, describe epidemics they attribute to the agency of an infected vessel, but during which they themselves admit that the disease manifested no signs of being transmissible from the sick to the well, the task of explaining the continuance and spread of that disease, after the departure of the vessel, is beset with difficulties. For some reason or other, the local causes of infection existing in the place, though admitted to be similar to those which have in other instances, in the same place or elsewhere, occasioned the fever, are not thought adequate to the effect of alone producing it on the occasion described. Some additional agency is thought requisite; and as the first cases occurred after the arrival and in the vicinity of a vessel, the bilge-water of which was perhaps offensive to the smell, that vessel is supposed to have furnished the agent in question. All this is very well; but, although the fever, during the time it prevailed, did not prove contagious in a single instance, yet it continued its epidemic career long after the removal of the vessel that had been the means of introducing that agent.

To reconcile these glaring inconsistencies, it is affirmed or suggested that the poison (whether introduced into a vessel during its stay in a sickly port, or elaborated in the hold or other parts matters not) when brought to a heretofore healthy place, contami-

nates the atmosphere of the latter, and spreads epidemically, notwithstanding the departure of that vessel, in consequence of having multiplied itself by assimilating to its own nature something it meets with there. In other words, the peculiar poisonous effluvium which, if imported into a perfectly clean locality, would occasion no evil effect, acts very differently when brought, during hot weather, to a place replete with the materials from which issue morbid effluvia; for it then plays on those materials the part of a ferment, and through their agency is enabled to reproduce itself, or out of them to give origin to a substance of the same nature, or endowed with identical properties; as yeast is generated during the vinous fermentation which yeast has set in motion.

If we admit this, we have certainly an easy explanation of the difficulties by which the question of the origin and dissemination of the disease among us and elsewhere is not unfrequently surrounded, and we need no longer trouble ourselves about seeking for proofs of the domestic origin of the yellow fever. We must cease to deny the importation of the latter on the ground that it is void of contagious properties. The transportation of this ferment can present no greater difficulty than that of any other ferment. The means by which it can be effected may generally be discovered, and have, indeed, been invariably pointed out; the quantity of it required is small; and as, when it finds the proper materials to act upon, and a suitable temperature to insure the success of its nefarious agency, it spreads widely, and may, though originally of trifling amount, poison the greater part or even the entire extent of a city, it follows that every time the disease breaks out in this country, or elsewhere, we may justifiably lay it to the score of importation, not only when its local origin cannot be made out in a perfectly satisfactory manner, but in instances when there can be no doubt that local causes capable of producing the effect could without much effort be pointed out.

Plausible as the theory may seem, and much as it may assist in explaining facts which otherwise might appear to some as of an intricate character, unless by reverting to the doctrine of direct importation, it is open to strong objections. It would be so even were the ferment viewed in the light of a contagious fomity, the product of a diseased body; for it is difficult to understand how it could in that case assimilate to itself the products of the mate-

rials it meets with elsewhere; since these products issue from materials of a totally different kind, which have no affinity with the other, and could scarcely be converted into anything like it. The effluvium thus generated would be a compound of a contagious virus, the product of an organic operation going on in a *living* body, and of exhalations resulting from the decomposition of dead organic matter. It would itself, when thus formed, become endowed with the power of occasioning a disease, also possessing contagious properties, transmissible from one individual to another, and similar to the one produced by the ferment alone, and without the assistance of the infectious exhalations in question. All this appears incomprehensible, and must be passed by without further comment.

The views of those who, while disbelieving in the contagion of yellow fever, or admitting that in an epidemic described by them the disease did not manifest properties of the kind, contend nevertheless for the mode of introduction referred to, are not more satisfactory. It must be remembered that the correctness of the facts adduced, as imparting an appearance of probability to the doctrine of importation, and lending support to that of infectious fermentation, is of more than problematical character; that we can scarcely point out a single fact of the kind that may not be explained in some other way; that in no well-authenticated instance has the disease been communicated by clothing or merchandise; that even in those instances in which such an origin is entitled to most credence, the disease did not extend; and the most that could be made out of them is, that such articles had been impregnated with infectious effluvia. It must be borne in mind, too, that in every instance in which the disease was traced to a ship, its cause was local in the latter, and, as already stated, did not spread its morbid influence beyond a short distance, and the influence ceased to be felt after the removal or the dissipation of the effluvia it had left behind. At the same time, it must be remembered that hundreds of facts establish conclusively the local origin of the disease; and that if, in a few instances, there is wanting some link in the chain of evidence respecting such an origin, we must, instead of concluding in favor of the exotic origin of the poison, base our opinions concerning those obscure instances on analogy with those in which the evidence is more complete.

But let this be as it may, in some instances the disease has broken out among us, and elsewhere, under circumstances when no ferment could have been introduced. No doubt, had vessels from the West Indies, or with offensive bilge-water, reached our wharves at the propitious season, they would have been regarded as the means of conveyance. But there was no clew to the supposition, and the disease was then, as it must be now admitted to have been, the offspring of domestic causes. If such was the case then, why should we suppose that in other seasons, when vessels *have* arrived from the West Indies, Africa, &c., they have carried an infectious ferment, and that the disease which ensued was the product of the chemical action of this, on the materials it met with after it reached its new destination? There is no more necessity for such a belief at one period than at another.

The idea of this assimilative fermentation, like the phenomena of perpetuation it is adduced to explain, can be viewed in no other light than that of a mere hypothesis, unsustained by a single well-accredited fact or plausible analogy. The property in question is not an attribute of any known variety of non-contagious febrile poisons.

If the exotic ferment reproduces itself in the way mentioned, there must be, in the places where it is introduced, materials of the kind necessary to bring about the elaboration of the particular poison giving rise to the yellow fever. Were it otherwise, it could not be multiplied by an assimilating fermentation. Its originating in tropical and southern regions, evidently indicates too that it requires the concurrence of high and long-continued heat, and sources of infectious decomposition. If such materials and such heats produce the disease and its generating ferment there, or if they do so in the hold of a ship navigating in hot climates, there is no reason why they may not generate it in temperate regions, and even in the cities and towns of our Middle States, provided circumstances of analogous character present themselves. Now, when taking into view the admission of the existence in this city, last year, and in all places where the yellow fever is supposed to be thus introduced, of the materials to be acted upon by the imported ferment, we inquire into the condition of the other influencing agent—high atmospheric heat—it is discovered that the circumstances under which the fever exists here and in other parts

of temperate regions, and prevailed in this city last summer, correspond exactly with those under the influence of which it appears within the tropics; for on turning to the history of the epidemics of the disease that have prevailed here and in other cities of the United States and Europe, the reader will perceive that the yellow fever requires for its development a certain range of atmospherical temperature—never appearing in seasons not characterized, during some length of time, by a heat equal to that existing within the tropics; while, on the other hand, in the latter, the materials of infectious exhalation are analogous to those which in temperate regions are supposed requisite for furnishing the matter to be acted upon by the ferment. In fact, whatever may be the local peculiarities and atmospheric conditions of places where the disease is supposed or admitted to originate, the same are found to exist in localities where it is thought to have been transmitted, and to have taken root. From this the conclusion is natural, that as the elements which enter into the composition of the poison exist in this and other cities and towns of middle latitudes where the fever prevails, as the fever cannot break out and spread there unless such materials exist, "and as in these places," to use the words of an American writer who has investigated the subject with great care, "the summer and autumnal seasons are frequently characterized by meteorological phenomena, which render them, in effect, tropical, the supposition of an exotic poison reproducing itself by an assimilative fermentation is totally unnecessary to explain the origin of the yellow fever epidemics." (Smith, 84.) The more unnecessary, indeed, because the fever, as we have seen, has occurred without the possibility of such an importation—a result, the truth of which is fully admitted by some of the warmest advocates of the doctrine in question.

It has been further objected, and with much reason, that it would be impossible, in the supposition of the poison operating as a spark thrown among highly combustible materials, and reproducing itself by assimilating existing materials to its own nature, to account for the slow and progressive manner in which localities usually become pestilential. (Smith, 85.) If the theory is question were correct, the air of a whole city, so far from becoming gradually infected, would very soon assume a pestiferous character; for the poison being scattered by the wind, would

quickly reproduce itself alike in every quarter. The laws which govern the changes occurring in fermenting mixtures will not hold in the present case; for in all instances with which we are as yet acquainted, the fermenting materials exist in a palpable form; whereas, in the present, both the ferment supposed to act, and the effluvia upon which it is to act, are placed beyond the reach of observation. Besides, there are no facts to justify the supposition that specific germs or aeriform poison assimilate others to their own nature. If it be said that the poison of yellow fever is absorbed by the soil, and by the adventitious materials by which the latter is covered; that when thus combined with corrupting materials, it induces therein a peculiar fermentation, by which it is reproduced, and is subsequently exhaled in the same manner as if it were primarily of domestic origin, our answer is easily found. The supposition is purely gratuitous; and, being neither supported by facts nor warranted by analogy, must make room—especially when we remember those instances where the importation of a ferment was in every way inadmissible—for the theory which ascribes the yellow fever to a poison generated in the localities where it breaks out, and whence it spreads epidemically.

By the larger number of those who advocate the hypothesis under consideration, nothing is said of the manner in which the assimilation contended for is effected, or of the nature of the poison which acts as the ferment, or of that of the compounds which being formed by the process may thus be carried from place to place. Having assumed as an incontestable fact, that the disease, in the instance they describe, was not of strictly local origin, but due to a cause, one of the elements of which was derived from abroad, they wisely abstain from all explanation as regards the nature of that element, or the manner in which it operates in the confection of the febrile poison, and leave the reader to draw his own conclusions in the premises. Others, more venturous than the preceding, fancy they can solve the difficulty, and confidently affirm that the travelling morbific fermentative agent, as well as the poison resulting from its operations, and giving rise, when formed, to the yellow fever, consists, like those of most other, if not all, zymotic diseases, in living organized microscopic beings. By some, these beings are referred to the animal, by others, to the vegetable kingdom. By all, they are regarded as produced out of

pre-existing germs, under peculiar and favorable circumstances of locality and atmosphere, and as capable of propagating and multiplying to an indefinite extent whenever and wherever those circumstances are found to exist, and, by their deleterious action on the system, of giving rise to particular morbific effects.

On this subject, it is not necessary that I should enter. The theory, or more properly speaking, hypothesis, whose origin may be traced to a remote period, is not destitute of plausibility, and has been defended with more or less ingenuity and ability in essays that would do credit to any professional writer, but sometimes in works which smack more of poetry than sound philosophy. The day may come when the existence of those mischievous germs, as well as the class of living things to which they belong, will be proved, and the morbific effects ascribed to them satisfactorily ascertained. Thus far this has not been done; and no one can find fault with etiologists who continue to regard the animalcular or cryptogamic nature of the poison of the yellow and other fevers as far from being sufficiently well established to merit serious consideration; or at least as not of a nature to justify us, in the present state of our knowledge, to regard either as calculated to induce us, by the facility it may afford in explaining the mode of transmission of the yellow fever from place to place, as well as for its continued prevalence in any locality where it is thought to have been introduced, to lend a willing ear to the opinion of those who contend for the occasional or frequent exotic origin of the disease in this and other cities, and advocate the doctrine of an assimilative fermentation.

In conclusion, I must remark that, if the facts and arguments that have been presented in the foregoing pages are entitled to the value I attach to them, we may conclude that the origin of the yellow fever which, after an interval of more than thirty years, visited this city last summer, can in no way be ascribed to a poison issuing from the barque Mandarin, and contaminating the surrounding atmosphere; but must be viewed as the product of exhalations from sources of infection existing in the localities where the disease appeared.

Propositions (51, 52, 53,) for Fellowship were presented.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM MAY 3, 1854, TO JULY 19, 1854, INCLUSIVE.

Stated Meeting May 8, 1854.

Dr. Wood, President, in the chair.

Present, twenty-four Fellows.

Drs. R. A. F. Penrose, Wm. Hunt, and Herman Robinett, were duly admitted Fellows of the College.

The following donation to the Library was received:—

Pneumonia; its Supposed Connection, Pathological and Etiological, with Autumnal Fevers; including an Inquiry into the Existence and Morbid Agency of Malaria, by R. La Roche, M.D., Member of the American Philosophical Society, &c. &c. Blanchard & Lea, Philadelphia, 1854. From the author.

The Secretary announced the death of Dr. Henry S. Patterson, a Fellow of the College, and Dr. Wiltbank presented the following resolutions, which were unanimously adopted:—

Resolved, That we have heard with profound emotion of the decease of our late Fellow, Dr. Henry S. Patterson.

Resolved, That in the death of Dr. Patterson, we mourn the loss of a colleague endeared to us in a peculiar manner by his ardent love of truth, by his manly decision and gentleness of character,

by his extensive literary and scientific attainments, and by his estimable social qualities, all combining in beautiful harmony to render him the beloved physician and honorable professional gentleman, and the eloquent medical teacher.

Resolved, That a copy of these resolutions, with the expression of our warmest sympathies, be tendered to the family of the deceased.

Resolved, That Dr. Darrach be requested to prepare a memoir of the deceased, to be read before the College.

Dr. HENRY HARTSHORNE called the attention of the Fellows of the College to some facts in regard to the recent occurrence of cholera on board the Tonawanda packet-ship from Liverpool. It appears, from information obtained through the captain and physician of that vessel, that she left Liverpool with a large number (I believe 700) of passengers, there being no cholera at the port at the time. No disease of any account occurred on board until she had been nearly two weeks out, when one or two passengers were attacked with cholera. A few cases only occurred during the first four or five days; but then the number greatly increased, so that, in all, 150 persons were affected, and 38 died. At the time of the greatest prevalence of the disease—on the day when the largest number of new cases and deaths took place—the ship came in sight of icebergs of considerable magnitude. From that moment the *cholera suddenly ceased;* no more cases of any grade occurred. The coincidence between the appearance of the ice masses and the cessation of the epidemic was evident and remarkable.

It was mentioned also, by the captain of the vessel alluded to, that the latitude and longitude in which the pestilence attacked his passengers and crew were nearly the same as those in which, several months before, the Tuscarora, of the same line, was similarly affected.

Both of these vessels, belonging to Cope's Line of Packets, are superior in their accommodations for passengers, and under the most careful supervision with regard to health. In neither case, was there any cholera at Liverpool when they started thence. There must, therefore, have been a *cholera atmosphere* or influence, of whatever nature, with well-defined limits of locality, which they entered and passed through. It was certainly a

striking fact, that this zone or atmosphere was suddenly and strictly limited by the contiguity of large masses of ice, which lowered the temperature of the region a number of degrees. Of the different theories with regard to the origin of cholera, that certainly most readily explains the fact, which refers the disease to causes of an *organic* nature—vegetative or animalcular. The occurrence should, therefore—although, of course, not decisive upon the subject—be remembered in accumulating evidence upon a question of such interest and obscurity.

MEMBRANOUS CROUP.

Dr. WALLACE stated that he had recently seen a case of croup in which recovery took place under apparently the most unfavorable circumstances. The child was under the care of Dr. N. Nancrede. It had been laboring for three days under symptoms of croup. Vomiting, purging with calomel, and leeches to the upper end of the sternum, together with the application of a solution of lunar caustic to the larynx, had been resorted to before Dr. Wallace was called in consultation. When he saw the child, about 3½ o'clock in the afternoon, there was a peculiar dryness, with great difficulty of respiration, and a tendency to coma. A solution of nitrate of silver, sixty grains to the ounce, was applied by means of a probang carried deep into the larynx, and three hours subsequently a similar application was repeated. Upon withdrawing the probang, the sponge was found covered with mucus, in which shreds of false membrane could be detected. At 10½ P.M., the patient was perfectly comatose; difficulty of respiration increased; abundant mucous râle was now detected throughout the entire chest. A teaspoonful of powdered alum was administered, but without any effect. Four grains of tartar emetic were then given in divided doses; this produced neither vomiting nor any perceptible influence upon the pulse. At midnight, eight grains of the sulphate of zinc were given, and repeated after a short interval; no vomiting following within the anticipated period; the patient was left. On visiting the house at 8 o'clock on the ensuing morning, Dr. Wallace found the little patient sitting up and playing with its toys. It appeared that soon after midnight copious vomiting had occurred of a thick,

tenacious mucus, containing shreds of a membranous appearance. The cough continued, but the breathing was much more comfortable; the mucous rattle still very audible; by each paroxysm of coughing the child discharged a mass of thick mucus, with shreds of membrane; the cough had lost its ringing sound, but the voice was still extinct. The child continued gradually to improve. At the end of a week, a mucous rattle was still detected at the lower part of the lungs, which, however, finally disappeared, and the child regained its ordinary health.

FRACTURE OF THE LOWER END OF THE RADIUS.

Dr. NEILL exhibited to the College several specimens and drawings of fractures at the lower end of the radius, to show the difference between "Barton's Fracture," "Colles's Fracture," and other fractures near the wrist which are confounded with them.

Three different fractures of the lower end of the radius were described, all producing somewhat of a similar deformity, and requiring a similar plan of treatment.

1. An oblique fracture immediately above the articular surface at the lower extremity of the bone. It commences upon the anterior or palmar face, about one-fourth or one-half an inch above the end of the bone, and, extending obliquely upwards and backwards, reaches the dorsal surface about three-fourths of an inch or one inch from the carpal extremity.

This is well described by many writers upon the subject, and good representations may be found in "Hind's Fractures," Malgaigne, and others.

One of the specimens exhibiting this fracture was a recent one, the dissection having been made about eight weeks after the accident occurred.

2. "*Colles's Fracture.*"—This was described by Colles, in 1814, in the *Edinburgh Medical and Surgical Journal*, vol. x. p. 182, and has been supposed by many to be identical with the third variety to be described presently. But, in order that there might be no further misapprehension upon the subject, the following quotation was read: "The fracture takes place at about *an inch and a half* above the carpal extremity of the radius, and exhibits the following appearances," &c.

3. "*Barton's Fracture.*"—This fracture involves the joint. The *articular surface* of the lower end of the radius is divided. The posterior or dorsal border of the carpal concavity is broken off and displaced, and the carpus following it occasions the characteristic deformity. "This accident must not be confounded with others, which are also of frequent occurrence, namely, fracture of the radius (1), or of the radius and ulna, *just above and not involving the joint.* It will be found, on referring to the writings of Boyer, Desault, Sir Astley Cooper, Dupuytren, and many others, that this frequently happens, and that the fracture often reaches to within a few lines of the extremity of the bone," as has been already mentioned in the description of the first variety.

The specimen illustrating this fracture was presented to the College by Dr. Bond, whose splint has been so satisfactorily and generally used in this city for the treatment of the injury.

FRACTURE OF THE ACETABULUM—HEAD OF THE FEMUR DRIVEN INTO THE CAVITY OF THE PELVIS.

Dr. NEILL exhibited to the College a specimen of fracture of the acetabulum, taken from a patient who had died in consequence of his injuries at the Pennsylvania Hospital. The man was drunk when the accident occurred, and no satisfactory account of the manner in which the injury was received could be procured. Besides the injury of the hip, he had a compound fracture of the olecranon and a fracture of the radius. The specimen is a rare one, there being but few cases on record where the diagnosis has been verified by subsequent examination of the specimen.

Sir Astley Cooper reports a case which occurred at St. Thomas's Hospital. The deformity simulated that of a dislocation backwards. The patient lived four days. The acetabulum was divided into three pieces, and the head of the femur deeply sunken in the cavity of the pelvis. (*Cooper on Fractures and Dislocations*, Am. edit. p. 138.)

Sanson describes the case of a young woman who threw herself from an upper story upon the pavement. (*Dict. Méd. et Chir.* tom. viii. art. "Fracture.")

Dupuytren, in his *Leçons Orales*, says that he has many times seen the head of the femur driven through the acetabulum, and

gives an account of a case in which it was difficult after death to extricate the head of the bone from the pelvis.

Robert Adams, of Dublin, refers to a case of Mr. Wallace at the Jervis Street Hospital. This patient also had a fracture of the femur. (*Cyclop. of Anat. and Physiology*, art. "Hip-Joint.")

Vidal de Cassis, vol. ii. p. —, speaks of Cooper's and Sanson's cases, and also of one of M. Gama, but gives no reference.

Earle, in the *Med.-Chir. Trans.* vol. xix. p. 249, gives an account of two cases, one of which he diagnosed and verified by *post-mortem* examination; the other case presented the same symptoms, and he made the same diagnosis. This patient was treated and recovered.

Dr. Neill remarked that, although the accident is a rare one, nevertheless it is important to recognize it, not so much from the necessity of any special treatment being required in fractures of the acetabulum, but from the danger of mistaking other injuries for it. It is important that it should not be mistaken for fracture of the neck of the femur or for dislocation.

In fracture of the acetabulum there is little or no shortening, great mobility of the limb, and flatness over the trochanter. But in fracture of the neck of the thigh-bone, although there may be great mobility and eversion, there is, at the same time, elevation and prominence of the trochanter; and where such signs exist there must also be great shortening of the limb.

The signs of fracture of the acetabulum are sufficiently distinctive from luxation to prevent its being mistaken. In luxations, the shortening, position of the foot, rigidity, and prominence of the trochanter should enable even a superficial observer to discriminate.

A proposition (55) for Fellowship, and one (3) for Associateship, were presented.

Stated Meeting, June 7, 1854.

Dr. RUSCHENBERGER in the chair.

Present, thirty-seven Fellows.

The Committee of Publication reported that No. 4, Vol. II., New Series, of the *Summary of the Transactions of the College*, had been issued.

The Treasurer presented his annual report for the year ending June 1, 1854, which, with the vouchers, were referred to the Censors.

The Chairman of the Committee on the Library announced the receipt of the following:—

Archives de Physiologie. Par M. Bouchardat.

Sur l'Application du Perchlorure de Fer de l'Exterieur à l'Interieur. Par A. Thierry.

Millherlungen über die Pestzu Pragin dem Iuhren 1718–14. Von Wilhelm Rudolph Weitenweber. From Dr. Zantzinger, Librarian Acad. Nat. Sciences.

Principles of Forensic Medicine. By Wm. A. Guy, M. D.

Lessons in Practical Anatomy. By W. E. Horner, M. D.

A Rational Exposition of the Physical Signs of the Diseases of the Lungs and Pleura. By Chas. J. B. Williams, M. D.

Researches into the Nature and Treatment of Dropsy. By Jos. Ayre, M. D.

Practical Observations in Surgery. By Thomas Hoy.

Des Diverses Methodes d'Exploration de la Poitrine. Par N. Collin, D. M.

Rapport du Conseil de Santé d'Angleterre sur la Maladie appelée dans l'Inde Choléra Spasmodique. Par W. Macmichael, D. M.

Pathological and Practical Observations on Diseases of the Stomach, the Intestinal Canal, etc. By Jno. Abercrombie, M. D.

The Institutes and Practice of Surgery. By William Gibson, M. D.

Observations on the Nature and Cure of Dropsies. By John Blackall, M. D.

A Treatise on Malformations, Injuries, and Diseases of the Rectum and Anus. By Geo. Bushe, M. D.

Five Dissertations on Fever. By Geo. Fordyce, M. D.

Discorso del Professore Antonio Goldoni in risposta alle cose a suo riguardo. Dal Signor Professore Giacomo Tommasini, nel II. volume sull' Inflammazione.

Instruction Pratique sur les Diverses Methodes d'Exploration de la Poitrine. Par Eus. Corbin, D. M.

Rapport de l'Académie Royale de Médecine sur le Choléra Morbus.

Mémoires ou Recherches Anatomico Pathologiques. Par P. Ch. A. Louis, D. M.

Recherches Anatomico-Pathologiques, et Thérapeutique, sur la Maladie connue sous les noms Gastro-Enterite, Fièvre Putride, Adynamique, Ataxique, Typhoide, etc. Par P. ch. A. Louis, D. M. 2 vols.

Recherches sur le Ramollissement du Cerveau. Par Léon Rostan.

Dell Inframmazione e della Febre Continua. Di G. Tommasini. 2 vols.

De la Membrane Muqueuse Gastro-Intestinale, dans l'état sain, et dans l'état Inflammatoire. Par C. Billard.

Histoire des Phlegmasies ou Inflammations Chroniques. Par F. J. V. Broussais. 3 vols.

Cours de Médecine Clinique. Par Léon Rostan. 3 vols.

Traité de Physiologie Appliquée à la Pathologie. Par F. J. V. Broussais. 2 vols.

Nouveau Dictionnaire de Médecine, etc. 2 vols. From Dr. Thomas B. Wilson.

Dr. S. JACKSON [late of Northumberland] read the following

PROOFS THAT DR. GRIFFITTS BLED IN YELLOW FEVER.

Whoever remembers Dr. Samuel Powell Griffitts, must entertain the highest respect for his opinions in medicine; and very many Philadelphians would even now be greatly swayed by his

authority. He studied his profession in this city, then in Paris, Montpelier, Edinburgh, and London; settled in Philadelphia in 1784, where he practised forty-two years with great reputation. He was some years professor of Materia Medica in the University of Pennsylvania, and for a long time vice-president of this college. He was a busy practitioner in all the epidemics of yellow fever, having been during all of them absent only two weeks, which time he spent in the country to gain strength after an attack of the fever. A beautiful memoir of him, by Dr. G. Emerson, may be seen in the *North American Medical and Surgical Journal*, vol. iii.

It has somehow got abroad, that this eminent man was opposed to bleeding in yellow fever; an error which I have thought it well to correct as soon as possible, for the authority of a favorite name is a formidable thing in the practice of medicine. He left some autographic notes, which are now in the possession of his son, William Griffitts, wherein he has mentioned something every day from the 1st of August to the last of October 1798, during which time the yellow fever was epidemic.

These notes are not such as might be expected from this highly gifted and conscientious man; there is no detail of treatment or of symptoms; there are many isolated facts and names of the dead and the cured, apparently intended to help his memory in some future compilation. But we learn from them decidedly, that bleeding, purging, mercury, and blisters, were his remedies; there is not a word said of anything else, nor does he speak explicitly of the quantity of bleeding or of purging, except in a single case. He frequently mentions persons that were cured, and often notes that he was comforted and inspirited by his success. The proportion of deaths to cures, however, is not mentioned, the numerical method of rendering our accounts not being then in fashion; but we may rest assured from the character of the man, that a moderate success would not have brought that comfort which he frequently expresses.

It is necessary to premise, that Dr. Griffitts was unfortunately an adherent of an erroneous pathology; he believed that this disease was imported and contagious—hence his manuscript book is indorsed "*Ship-Fever*, 1798." He published a few pages in the *Eclectic Repertory* for 1816, vol. vi., wherein he confirms his early

opinions in these words: "After a long and painful acquaintance with it, I am well convinced that its proper character is *the ship, or jail, or hospital fever of tropical climates;* that it is of course a disease *sui generis*, distinct from the endemic or indigenous yellow fever of the West Indies, and from the bilious remittent fever of hot climates. I have seen it, and carefully attended to its nature and progress in Philadelphia in the years 1793, 1797, 1798, 1799, 1802, 1803, 1805."

In these pages of the *Eclectic Repertory*, he says nothing of the treatment; and it is not known that he left anything on yellow fever except these, and the manuscript mentioned above. He appears to have acquiesced fully in the practice of Dr. Rush; and this authoritative man having written largely on the yellow fever, it is probable that Dr. Griffitts thought it unnecessary for him to publish on the subject, particularly as Rush had often mentioned him and his practice with decided approbation. He had, moreover, says his elegant biographer, Dr. Emerson, "a reluctance to appear before the public, and his communications were drawn forth only by a sense of duty."

He says in the *Eclectic Repertory* that he had never seen one of his *own* cured to take the disease again, either in the same or subsequent years; but what others had said of second and third attacks he would not controvert. He thought this *ship fever of tropical climates*, as he called it, was perfectly monochronous, and that this was one of the pathognomonics that distinguish it from the miasmatic remittent of hot climates. He says: "Those who have suffered once from bilious remittent or intermittent fever, are much more liable than others to be affected." This is partly an error, adopt it who may. I can testify from long and extensive experience, that persons who have passed through a long and severe attack of remittent miasmatic fever, are generally exempt for many years, if not forever; and that one who has fairly worn out the intermittent by the strength of his constitution, seldom suffers from it in after time. But Dr. Griffitts seems not to have known, that even his *tropical fever* is not perfectly monochronous. Sir James Fellows (*Reports*, p. 129), quotes the Rev. Mr. Beiker, a chaplain in the army, who wrote in French some notes on this fever, which was, *as supposed*, carried to Gibraltar in 1804. "All persons of every age and sex, who had

once had the fever strongly, (*fortement*) at Gibraltar, might have lain down with the dying without taking the disease again; but it was not so with those who had experienced light attacks."

There are some notes in the *manuscript* for every day during the three months, but I shall quote merely those days in which something is said relative to bloodletting, or to the success of his practice:—

"*Aug.* 6 and 7. Dr. Benneville, and two others, were cured by bleeding, mercury, &c.

"23*d.* My practice much among the poor. Those who are properly attended and seen in time, generally recover. Three cases quite well to-day, two of which were very bad. I use the following plan: as soon as called, bleed largely; give pills of four grains of calomel every two hours till they purge—if too much, give a little opium; repeat the bleeding *pro re natâ*. Continue this course for the first three days; then purge with sol. tart., or senna and rhubarb, constantly and largely. Apply blisters to wrists after third day in case of nausea, weakness, or fever, and to the stomach if any appearance of vomiting come on. The fever appears to be much more violent and contagious than in 1793 and 1797.

"29*th.* Several children affected with the fever; most of them recover.

"*Sept.* 2. A patient who appeared to be doing well in the morning neglected bleeding, and died in the evening with profuse hemorrhage.

"5*th.* Upwards of sixty visits, and obliged to refuse many applications.

"6*th.* Encouraged by the situation of my patients. Remedies, when properly applied, seem to do as much as can be reasonably expected. Mercury, when it produces salivation, does everything.

"8*th.* Feel much relieved, and, I hope, thankful. Many of my patients doing well.

"13*th.* Much encouraged by the situation of my patients, except those to whom I was called late.

"18*th.* No death among my patients to-day. Visited forty-three cases of fever. Mercury certainly does more than any other medicine.

"21*st.* Remarkable case of a boy of about twelve years, violently seized; was bled, and lost more afterwards—in all, about twenty ounces; in the evening his fever nearly gone, but very comatose; his head was shaved, and next day he was quite well. He also used the calomel pills."

From this to October 30, something is noted every day, but nothing relative to our present purpose. It is not known, as above said, that he left anything on yellow fever except these notes, and the few pages in the *Eclectic Repertory*, vol. vi., where nothing is said of the treatment. Now remember, that he looked upon bleeding, purging, mercury, and blisters, as the great remedies; that he says: "they seem to do as much, when properly applied, as can be reasonably expected;" that he frequently derives comfort from his success therewith.

Though he is very indefinite as to the quantity of blood he drew, he speaks in his general summary of remedies (note for Aug. 23), as bleeding copiously at first, and of repeating the operation *pro re natâ*. His Latin phrase will be estimated differently by different minds; but its meaning, on the present occasion, is very happily ascertained and determined by his letter to Dr. Rush (*Med. Inqs. and Obs.* vol. iii. p. 268), dated Oct. 19, 1793, during the prevalence of the fever:—

"I cannot leave town without a parting adieu to my kind friend, and sincere prayers for his preservation. I am sorry to find that the use of the lancet is still so much dreaded by too many of our physicians; and while lamenting the death of a valuable friend this morning, I was told that he was bled but once during his disease. Now, if my poor frame, reduced by previous sickness, great anxiety and fatigue, and a very low diet, could bear *seven* bleedings in *five* days, besides purging, and no diet but toast and water, what shall we say of physicians who bleed but once?"

If any cacodæmonous person should question the authenticity of this letter, let him know that it was repeatedly published in Philadelphia during the last thirty years of its author's life, and not contradicted. But it is of more importance to observe, that he must have perceived very clearly the utility of bleeding thus copiously, or he could not have persuaded himself to pour out blood in what he thought was *ship fever*, a disease in which no

man dared to bleed in those times, unless in a very few cases, and sparingly in these. Even Rush bled very little in this fever. He says, in his 127th annotation to Pringle: "There were *now and then* cases in which the loss of a *few ounces* of blood was found to be useful in the military hospitals of the United States." Observe, that Dr. Rush bled less in 1798 than in previous years. He says, vol. iv. p. 68: "The pulse was, in many cases, less active in the beginning of this fever than in former years." In p. 72, he says: "The system, in many cases, was prostrated below the point of inflammatory action." In p. 78: "There were cases in which the lancet was altogether forbidden."

Now, when we consider that Dr. Griffitts looked upon this as *ship fever*, in which hardly any one bled in those times—that he must then have read Dr. Chisholm's book, published in 1794, in which he utterly condemns bleeding in this disease*—that even Dr. Rush did not bleed as generally as in former years—we may fairly rank this eminent physician among the courageous bleeders. Here is a striking proof how experience triumphs over previous theory, and how the *juvantia et lædentia* finally direct the physician and reveal the nature of disease. He was not deterred from bleeding by the name *ship fever*, nor yet by the authority of the highly gifted and positive Chisholm. How much he bled, is not clearly ascertained, but he speaks of bleeding at first copiously, and of repeating the operation *pro re natâ;* the indefinite meaning of which technical phrase is pretty well ascertained, as I observed above, from his letter to Dr. Rush.

The history of this *tropical ship fever*, as it existed in the imaginations of Griffitts, Chisholm, and others, is almost as curious and incredible as that of Robinson Crusoe. Suffice it to say at present, that the ship Hankey left Bulama Nov. 1792, and after various misfortunes and detentions, put into Grenada, one of the West India Islands, in Feb. 1793; that Dr. Chisholm and others supposed a very fatal disease, which soon invaded the island, was brought by this ship, closely wrapped up in the clothes and other

* Dr. Chisholm, however, in his second edition, 1801, having read Dr. Rush in favor of bleeding, admits, vol. i. p. 336, that in the very beginning of the fever, and under a conjunction of various circumstances conducing to "unequivocal signs of an inflammatory disposition, then one plentiful bleeding may undoubtedly be of infinite service." He does not say that he ever tried it.

effects of those who had died at Bulama and on the voyage. Now, Dr. Chisholm had always considered the yellow fever of the West Indies as arising from indigenous marsh miasma, and that it was not contagious, nor yet very mortal; but this *new fever*, as he called it, was in his opinion contagious, and very fatal, and having appeared soon after the arrival of the Hankey, it was supposed to be some direful malady brought from the coast of Guinea.

It was supposed to have been carried the same year to other West India Islands and to Philadelphia, causing the dreadful epidemic of that memorable year. In 1794, it was taken back from Philadelphia to Grenada; and it went in subsequent years to Cadiz, Malaga, Gibraltar, and other cities of Spain. Such was the opinion of Dr. Chisholm, and other highly gifted men.

This Bulama pest, "*this typhus, ship, jail, or hospital fever of tropical climates*," was our yellow fever of 1798 and subsequent years, which Dr. Griffitts treated, much to his comfort, by bleeding, and for which he himself was bled seven times in five days. From this it appears, that he had not only learned from Dr. Rush the necessity of profuse bleeding in this fever, but he had also learned that lesson which the great professor was accustomed to impress more strongly than any other—"*to disregard the name of a disease*"—for Dr. Griffitts knew very well that all the *ship, jail, and hospital fever* that he had ever before heard of, abhorred the lancet, and that no one used it therein without a fainting spirit.

During our epidemic of 1793, the Philadelphia physicians had not heard the particulars of the Bulam fever which had infected Grenada on its fatal way to their city, therefore they were not debarred from bleeding by the voice of Dr. Chisholm; but Dr. Griffitts had unquestionably read, before 1798, of what had been done and thought at Grenada by Chisholm; therefore, he was ready to call the epidemic of this year by the names *typhus, ship, and Bulam fever*, and to consider it, as mentioned above, more contagious than in 1798. In this apparent increase of contagion, the imagination no doubt played its usual pranks, even with the sober mind of the Doctor. But all these considerations flowing in since 1793, did not deter this candid and skilful man from the free use of the lancet, which he had personally suffered seven times in five days, as expressed in his letter to Dr. Rush.

The fiery contentions concerning the Hankey, which were yet rife when I was a student, have passed away, but the records of the fever that was traced from Grenada to Philadelphia and back again, then to Malaga, Cadiz, Gibraltar, &c., still remain, and show clearly that it was nothing but plain yellow fever, as described by Mosely and others before this fatal ship was built. The following facts render this certain:—

1. At Grenada, it ceased in September under the washing of continual and heavy rains. Now, these did not wash out the houses, beds, and clothing, or reach the cause of typhus.

2. It touched the negroes very lightly. Chisholm says: "About one in four was seized with it, and the mortality was 1 in 83." He says that only two died, and that even these would probably have lived had it not been for their *mal d'estomac*, or dirt-eating. Now, the real typhus is universally more fatal to the colored than to the white people.

3. "The persons most liable to it were: 1. Sailors, more especially the *robust* and young—those least accustomed to the climate, and those most given to drinking rum. 2. Soldiers, more especially recruits lately from England. 3. White males, lately arrived." Of 84 soldiers who had been on the Island three years, 56 were seized, and 5 died; but of 27 new-comers, 26 took the fever, and 21 died.

4. The attack was sudden and violent, coming on with severe pain in the head, back, and limbs. There was intolerance of light, and "a quick, hard, and small pulse." This sometimes came down to 30 in the minute. It never intermitted, Dr. Chisholm thinks; but his observation is merely testimony to the negative. There was never any subsultus tendinum, so common in typhus.

5. The deceitful remission so characteristic of yellow fever, marked the Grenada fever. "The patient then considers himself better, and is for the moment flattered with the hope of recovery."

6. It was often attended by the yellow suffusion, and generally by the black vomit. "Towards the fatal crisis always black, and resembling coffee badly boiled."

7. Then, consider the time of year. In Philadelphia, in the other islands, and in the various cities of Spain, it was a summer

disease, as it was in Grenada. It ceased here in September, as above said, under the washing of long and heavy rains.

8. In fine, the whole history* of this fever, by Dr. Chisholm, proves clearly that it was the pure yellow fever; and it is surprising that so clever a man should have been so strangely prepossessed. But there is a sufficient reason for everything, and we think that Dr. Chisholm's cloudiness of mind on this question may be thus explained. *The ship did truly bring the typhus or ship fever to Grenada, and did infect a few of the inhabitants and sailors from other vessels; but it soon became extinct, and the Doctor did not distinguish it from an unusually malignant yellow fever that quickly followed, and prevailed during the summer.*

That the Hankey did bring the typhus fever is very probable, for the generation of this fever was to be expected in that ship. She had lain at Bulama from June to November, during which time the whole crew, with the colonists, numbering two hundred persons, lived in her and suffered much sickness, and one hundred and fifty deaths from the African remittent fever. Now, it is very certain that, in such a company of sickly, dispirited people, there could not be that attention to cleanliness which the prevention of typhus required; nor was the cause of typhus so generally known as at present. Add to this that the captain suffered a long sickness, and was unable to attend to the cares of his station.

The ship sailed for England in November, carrying all that remained of the sickly crew and colonists, thirty-eight in number, as also the clothes and other effects of the dead; then, after various detentions, during which there was much sickness and some deaths, this fatal ship put into Grenada the 19th of February, and infected some who went on board, as also the crews of ships that lay adjacent. About the middle of April the disease began on shore, close to the wharf, and was introduced by a negress who took in the washing of sailors' clothes. "The whole of this family was successively affected, and by them the fever was communicated to all with whom they had any intercourse; * * * all who from friendship, business, or duty, communicated with the disease, were themselves afflicted."

* All my quotations are from Chisholm's first edition, Philadelphia, 1799, from p. 89 to 143. It was published in London, 1794.

Thus far, Chisholm has told us a very probable story that has many parallels—one is, that Dr. Hector McLean says, p. 73, "a contagious fever that carried off numbers" was taken to St. Domingo from an encampment in Ireland.

Had Dr. Chisholm been employed for a longer time by the first fever, and written its history before he was blinded by the second, he would have given us a description of the real typhus; but there sprang up in the hot weather an uncommonly malignant yellow fever, and this obliterated all his ideas of the previous typhus. Even Dr. Griffitts is confounded by Dr. Chisholm's confusion. What he called the fever in 1793 we know not, but ere 1798 he had read Chisholm's book, which prepared him for calling it *ship, jail, or hospital fever;* and this name he published in 1816, though he must have seen much of typhus during his long service in the penitentiary.

This hypothesis of two fevers in Grenada is, as far as I know, entirely my own. It certainly does not square with all Dr. Bancroft's bold and reckless assertions, but it is philosophically possible, and more probable than that such a man as Chisholm should have wittingly published falsehoods. Even if the Hankey put into Grenada without sickness on board, there is no proof that she brought not the causes of sickness to those who had not been for months gradually hardened, as her crew must have been, against their influence. The prisoners taken to the Old Bailey, and to the Exeter Assizes, were no doubt all well; but they took with them the *fomites,* which infected numbers in the court-house. Many similar infections might be adduced, thus proving what Cullen and Lind, perhaps many others, have said—that *fomites* are more dangerous than the diseased body.

Dr. REESE read the following communication, from Dr. Gilbert, on

CHOLERA.

During the period intervening between the 1st of October, 1853, and 1st of June inst., in the official capacity of Port Physician, I visited ninety-one vessels in the harbor of Philadelphia, from foreign ports. Of these ninety-one vessels, fifty-five carried under one hundred passengers, each; sixteen, from one to two hundred;

nine, from two to three hundred; six, from three to four hundred; three, from four to five hundred, and two from five to six hundred, each.

The passengers and crews of these vessels were sufficiently healthy during their passage, and on their arrival here, to authorize their immediate landing, except those of three of the largest class, to wit:—

Ship Tuscarora, Captain Turley, 469 foreign passengers from Liverpool, arrived November 26, 1853.

Ship Tonawanda, Captain Julius, 654 foreign passengers from Liverpool, arrived April 22, 1854.

Ship James Brown, Captain Wilson, 253 foreign passengers from Liverpool, arrived May 24, ult.

The last-named vessel is an old offender, and on this occasion, as well as previously, was disgustingly filthy. On inspection, eighteen cases of ship-fever were found to exist. These were nearly all of recent occurrence, the voyage having been unusually short—thirty-two days. She was sent to the Lazaretto, where in a few days the number of cases increased to fifty-two.

The cases of the other two vessels mentioned, possess peculiar interest, and on this account the following facts are communicated, in the hope that something may be added to our common stock of professional knowledge.

The ships Tuscarora and Tonawanda both belong to "Cope's black cross line of packets," sailing between this port and Liverpool. They are large, and as well ventilated and provided with all appliances for health and comfort as are usually seen in the best emigrant vessels. Their captains are not only skilful sailors, but good disciplinarians, and require all on board to observe cleanliness of person, and to ventilate their apartments to the fullest extent possible on board of vessels crowded with emigrants. These vessels, consequently, though carrying very nearly their full complement of passengers, are usually freer from those diseases which are caused by decomposing bodily emanations, than other vessels not regularly engaged in carrying passengers, and whose captains are less careful to observe the means of preserving the health of their passengers.

The Tuscarora sailed from Liverpool on the 17th of October, 1853, with 594 passengers, all in good health. The weather being

severe, the passengers were obliged to remain below the greater part of the first week, during which many became sea-sick. On the 22d, when five days out, diarrhœa made its appearance. On the 28th, in lat. 50° 11′ N. a case of cholera occurred. The patient was a male adult, æt. thirty, and died in ten hours.

Case 2. November 3, I. M., male, æt. thirty, was attacked—reaction—died in low consecutive fever on the 9th.

Case 3. Sarah D., æt. twenty years, November 4, died in twelve hours.

Case 4. Ann. G., æt. nine years, died in eight hours.

Case 5. Johanna C., æt. seven years, November 6, died in four days.

Case 6. Susan W., æt. twenty-eight years, November 12, died in twenty-eight hours.

Case 7. Timothy C., æt. four years, November 14, died in forty-six hours.

Case 8. Elizabeth M., æt. sixty-three years, November 14, died in forty-six hours.

Case 9. Elizabeth P., æt. five years, November 14, died in sixty hours.

Case 10. Bridget Houl, æt. one and a half years, November 18, died in forty-six hours.

Case 11. Margaret P., æt. three years, November 17, died in three days.

Case 12. Sarah M. F., æt. five years, November 22, died in forty hours.

Of the above twelve deaths by cholera, five only were adults. Two other adults died during the passage, one of dysentery, and one very aged female of diarrhœa. Eleven children died of the following diseases: Injury of brain, one; croup, one; diarrhœa, six; congestion of the brain, one; teething, one; scarlatina, one. Total, twenty-five.

None of the crew sickened during the passage. A very large proportion of the emigrant passengers, about two hundred, who had diarrhœa, dysentery, and cholera, recovered. The disease abated so that, for the last six days of the voyage, there were no new cases or deaths by cholera, diarrhœa, or dysentery. The following were the only cases of indisposition when the vessel was inspected on the 26th.

1. Child aged six years, typhoid fever after cholera, recovering.
2. Child aged six years, chronic diarrhœa.
3. Child aged four years, recovering from measles.
4. Old woman, aged seventy, chronic diarrhœa.

Captain Turley stated that there were numerous cases of cholera at Liverpool when the ship left.

Ship Tonawanda, Captain Julius, sailed from Liverpool on the 17th of March (1854), having on board 712 passengers, being within fourteen of her full complement.

The passengers and crew were healthy when they left Liverpool, and continued so, excepting the usual sea-sickness, until the 22d, when, in lat. 50°, long. 21° 40′, a case of cholera asphyxia occurred in an adult, which terminated fatally in one hour after the surgeon of the ship was called to attend it. The next case was reported on the 26th, four days subsequently—recovered. On the 27th, five cases occurred. After this the disease increased rapidly from day to day until the 4th of April, fourteen days after its first appearance, when it suddenly ceased under the lee of an iceberg, in lat. 42½°, long. 50°, after which not a single case occurred. There were in all about one hundred and fifty cases of cholera. Of these, thirty, the largest number of seizures in any one day, were reported on the last day of the prevalence of the disease. The whole number of deaths by cholera amounted to thirty-nine (39), including three of the crew. The thermometer stood at 55° on the 4th of April. It fell to 31° during the night, and continued about the same during the 5th, and there was an end to cholera. The vessel arrived in this port on the 22d April, thirty-eight days after having left Liverpool. During the passage twenty cases of measles occurred amongst the children—of whom three died. The first case of measles was observed on the 18th of March, one day out of port; the second case on the 28th of March. From this time they continued to occur until the vessel arrived in our waters. There were four other deaths amongst the children—from diarrhœa, two; exhaustion, one; marasmus, one. Total, forty-six deaths.

The change of temperature which so evidently arrested the cholera, produced no effect upon the measles. The captain and surgeon report Liverpool healthy.

On inspection of the passengers and crew immediately after their

arrival in this port, it was ascertained that the surviving cholera patients had entirely recovered. There were two cases of measles, one of ship-fever, and two cases of rheumatism.

D. GILBERT.

June 7, 1854.

Dr. HOLLINGSWORTH addressed the College, substantially as follows, on the

PUTREFACTION OF ANIMAL SUBSTANCES.

In the February No, of Liebig's *Annalen*, there is an interesting article, by MM. Schröder and Von Dusch, upon filtration of the air in connection with fermentation and putrefaction. Aware, from Schwann's experiments, that putrefaction does not occur in a freshly-boiled infusion of flesh, when the air which has access to it is previously exposed to a red heat, they were led to the supposition that, if the cryptogamic and infusorial germs—considered by Schwann to be the cause of fermentation and putrefaction—were mechanically excluded from entering into the infusion, decomposition would not ensue. To test this, two flasks, containing fresh boiled meat and its decoction, were placed alongside of each other. One of these had a long tube entering it, which, during the ebullition, was packed with raw cotton, previously heated in a water-bath. Another tube, in the same flask, was connected with a gasometer, filled with water, in such a way that, as the water escaped by drops from the discharge-cock of the gasometer, air must pass through the cotton and infusion to replace it. By this means, there was a continuous current of air upon and through the infusion. The other flask was left open. In the second week, it was found that the broth in this latter flask had become exceedingly offensive. The other was opened on the twenty-fourth day, and found entirely unchanged, presenting, when heated, the characteristic smell of fresh broth. Similar results were obtained by experiments upon freshly-boiled malt-wort—it remaining unchanged for weeks, when the air which had access to it was previously filtered through cotton.

As I was much interested in these experiments, I thought I would try them myself, and taking the two glass globes, which I

here present, I partially filled them, twenty-four days ago, with a strong decoction of meat. Then, while the decoction was boiling in this flask, I filled its neck, which is about three-quarters of an inch in diameter and one inch long, with raw cotton, loosely packed. The other globe, containing the remainder of the decoction, was left open. The room in which they were both left was a garret—its temperature about 80°. On examination, eight days afterwards, the decoction in the open vessel emitted an intolerably putrid odor, much more offensive than it will be found to be at present. The broth in the other vessel, which I open now, is, I find, perfectly sweet and fresh.

The true theory of fermentation and putrefaction can only be deduced from a careful examination of the phenomena connected therewith. There is no real dividing line between the two processes. The term fermentation is generally applied to those changes in which the action is most rapid when the products of decomposition still retain a high rank as organic combinations, and in which one or more of the products are of greater or less practical value to man. Putrefaction, on the other hand, may be defined as a slower decomposition, in which the elements resolve themselves into simpler combinations, some of which emit a highly disagreeable odor, and which serve no useful purpose to man, excepting as manures, where the *elements*, not the *compounds*, are found useful. We will, therefore, treat of the two actions as one and the same, under the term fermentation.

The following are the now-received theories of this process:—

1. That the decomposition is produced by a ferment, that exerts a catalytic action upon the molecules of the substance in contact with it. This, which is Berzelius's view, merely gives a name to the action, but does not explain it.

2. That the ferment, by the action of the oxygen of the atmosphere, suffers a diminution of the attractive power that holds its molecules together, which results in the formation of new compounds, and that, when this action has once commenced, it continues (even by exclusion of further access of air). A mechanical motion is thus communicated to the fermentative substance in contact with it, producing a change in *its* atomic structure, and forming new compounds—the products of fermentation. This is Liebig's theory. It utterly fails, however, to account for the

general, if not universal, presence of animalcules and plants; for the effects of heated air upon fermentation; for the effects of filtration; and for many other facts.

3. That fermentation is induced by the presence of germs of microscopical animalcules and plants, which require, as essential to their growth and development, the presence of moisture, warmth, and generally speaking, air. The absence of any one of these, checks the growth of the germs, and, consequently, stops the fermentation. Many poisons, both mineral and vegetable, destroy these germs, with the like results. Schwann is the author of this latter theory. If we adopt his views, we can understand why decomposition does not take place in a fresh decoction of meat under certain circumstances. The germs existing in the meat or water are destroyed by the ebullition. Other germs are mechanically excluded by the plug of cotton; and, though moisture, heat, and air are all present, the germ—the *primum mobile*—not being there, no chemical change ensues.

It should be remembered that the chemical affinities by which organic substances are held together, are very slight, and easily disturbed. They offer, in fact, but little resistance to the action of disturbing agents. Let the germs of cryptogamia and infusoria, which are always present in the atmosphere, be once deposited, and they soon grow, taking to themselves, by endosmose, from the soil in which they are present, sufficient material for their sustenance and development. In this way, molecular attraction, in a *non-living* organic substance, soon becomes affected, and thereby resolves the substance into new and simple compounds.

The cryptogamic origin of zymotic diseases derives, we think, some support from the above views of the cause of decomposition. It is a general belief that animal and vegetable matters, in the stage of decomposition, cause various epidemic and miasmatic diseases. It is also well known that the direct introduction of putrid, decomposing, and other deleterious organic substances into the system, produces affections very similar in their nature to those caused by animal and vegetable exhalations. All these zymotic affections, though widely differing from each other in their symptoms and duration, are characterized by more or less prostration of the vital powers from the very commencement, and by a changed and deteriorated condition of the blood. Is it

very improbable, then, to presume that the presence and development of microscopic germs produce the same, or somewhat similar, phenomena—viz: decomposition, change, and deterioration of blood and other fluids in the living body—just as we have seen them do in dead organic matter?

It is a singular circumstance, that certain infusoria and cryptogamia are peculiar to, and are only seen to develop themselves in certain substances—resembling, in this, the floræ and faunæ of the earth, which have each their respective habitats. Yeast has its toruli cervisii; flesh, in a state of decomposition, its fibrio lineola and monas termo; diabetic, or grape-sugar, urine, its sugar fungus, &c. It is possible that each of the zymotic affections has its own peculiar fungus, the growth and spread of which is proportional to the extent and prevalence of the disease. Or we may imagine that all these affections are due, not to the peculiar or specific action of one species, but that the disease is the combined product of any one or all of them, and of atmospheric and other general influences acting upon the human system.

A proposition (56) for Fellowship was presented.

Stated Meeting, July* 4, 1854.

Dr. WEST in the chair.

Present, twenty-six Fellows.

The Censors reported that, on examination, they find the accounts of the Treasurer, for the year ending June 1, 1854, to be correct.

The Curator reported that, during the past year, nothing had been presented to the Museum. The various objects in it are in good condition.

On motion of Dr. CONDIE, the annual contribution to the Library was postponed.

In obedience to the provisions of its charter, the College proceeded to elect officers to serve for the ensuing twelve months.

Drs. NEILL and RUSCHENBERGER were appointed Tellers to conduct the election. They reported that the following-named Fellows were duly elected officers of the College.

Dr. GEORGE B. WOOD, *President.*
Dr. CHARLES D. MEIGS, *Vice-President.*
Drs. HENRY BOND, J. WILSON MOORE, SAMUEL JACKSON, and GEORGE W. NORRIS, *Censors.*
Dr. FRANCIS WEST, *Secretary.*
Dr. J. RODMAN PAUL, *Treasurer.*
Dr. JOHN NEILL, *Curator.*

Previous to the balloting, Dr. CONDIE, who has served as Secretary nearly twelve years, declined re-election.

Dr. WEST expressed his sense of the honor of being elected Secretary, but respectfully declined accepting the office.

* This was the first meeting held in a building (situated on Spruce street, between Eighth and Ninth streets), recently leased to the College by the Managers of the Pennsylvania Hospital.

To fill the vacancy thus created, another ballot was cast, which resulted in no choice.

On motion of Dr. F. G. SMITH,

Resolved, That when the College adjourns, it will adjourn to meet on the evening of the 19th inst., for the purpose of electing a Secretary.

On motion, Dr. RUSCHENBERGER was appointed Secretary *pro tempore*.

Dr. RICHARD CLEMENTS and Dr. WM. H. GOBRECHT were duly elected Fellows.

A proposition (57) for Fellowship was presented.

Adjourned Meeting, July 19, 1854.

Dr. WOOD, President, in the chair.

Present, thirty-nine Fellows.

The President appointed Drs. WEST, REESE, and SAMUEL LEWIS, the Library Committee for the ensuing year; and Dr. RUSCHENBERGER the Committee on Meteorology and Epidemics.

The following donations were received for the Library:—

A Universal Formulary: containing the method of preparing and administering officinal and other medicines. The whole adapted to physicians and pharmaceutists. By R. Eglesfeld Griffith, M. D. A new edition, carefully revised and much extended, by Robert P. Thomas, M. D. With illustrations. Blanchard & Lea: Philadelphia, 1854. Presented by Dr. Robert P. Thomas.

The Medical Formulary: being a collection of prescriptions, derived from the writings and practice of many of the most eminent physicians in America and Europe. Together with the usual dietetic preparations and antidotes for poisons. To which is added an appendix on the endermic use of medicines, and on the use of ether and chloroform. The whole accompanied by a few brief pharmaceutical and medical observations. By Benjamin Ellis, M. D., late Professor of Materia Medica and Pharmacy in the Philadelphia College of Pharmacy. Tenth edition, revised and much extended, by Robert P. Thomas, M. D., Professor of Materia Medica in the Philadelphia College of Pharmacy. Blanchard & Lea: Philadelphia, 1854. Presented by Dr. Robert P. Thomas.

Descriptions of New Reptiles from California. By E. Hallowell, M. D., &c. From the Author.

Dr. WEST, on behalf of the Library Committee, announced the receipt of

Kölliker's Manual of Human Histology, Vols. I. and II. Published by the Sydenham Society.

On motion of Dr. ALFRED STILLÉ, it was unanimously

Resolved, That the thanks of the College be, and are hereby, presented to Dr. CONDIE, for the zeal, fidelity, punctuality, and skill with which, for the past twelve years, he has performed his duties as its Secretary.

On motion of Dr. WEST, from the Library Committee,

Resolved, That the Fellows be required to return immediately all books in their possession, belonging to the College, in order to facilitate the contemplated preparation of a revised catalogue of the Library, and that the Secretary be directed to append this resolution to all the notices of the meetings of the College for the following three months.

The College proceeded to vote for a Secretary, and the Tellers (Drs. WEST and STILLÉ) reported that Dr. RUSCHENBERGER had been duly elected.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM AUGUST 2, 1854, TO OCTOBER 4, 1854, INCLUSIVE.

Stated Meeting, August 2, 1854.

Dr. Charles D. Meigs, Vice-President, in the chair.

Present, twenty-one Fellows.

Drs. Richard Clements and Wm. H. Gobrecht, were duly admitted Fellows of the College.

Dr. Emlen read the following

BIOGRAPHICAL NOTICE OF THE LATE DR. THOMAS R. BRINCKLÉ.

Amongst the number of the Fellows of this College, who, within a short period, have "passed from life unto death," has been one whose modest and retiring disposition, and an innate reluctance to notoriety, prevented him from being duly appreciated by many of the same profession as himself; but whose intrinsic and unobtrusive worth, and many excellencies of head and heart, endeared him to those who enjoyed his intimacy, and rendered him worthy a better biographer than he who now offers this humble tribute to his memory and his merit. I allude to Dr. Thomas R. Brinckle, who died on the 18th of July, 1853, in

the forty-ninth year of his age. He was the seventh son in succession of the late Dr. James Brinckl\u00e9, of Delaware, and was born in Kent County, of that State, on the 20th day of September, 1804. His preliminary education was completed in Wilmington; and, having resolved to devote himself to the profession of Medicine, he commenced its study under the direction of his brother, Dr. Wm. D. Brinckl\u00e9, and graduated in the Medical Department of the University of Pennsylvania, in 1826. For some years previous to his death, the state of Dr. Brinckl\u00e9's health admonished him that it was proper for him to relinquish the more arduous part of the duties of his profession; his business, therefore, became more circumscribed; and to this, in connection with his natural diffidence, may be attributed the apparently little intercourse existing between himself and his professional brethren. Few men, however, felt greater interest in the profession than he did; and he always entertained and expressed the highest respect for those who held an honorable position in its ranks. In the commencement of Dr. Brinckl\u00e9's medical career, he contended manfully against the innumerable obstacles to professional preferment, which almost invariably beset the pathway of the young physician; but pursuing his course onward, swerving neither to the right nor to the left, and never derelict in the duties he owed to his patients, his professional brethren, or himself, he gradually attained a position on which he had just cause to congratulate himself. As a practitioner, Dr. Brinckl\u00e9 was eminently successful. He detested polypharmacy and charlatanism in every form; and by the careful selection, and judicious administration of his remedies, he was seldom disappointed in his expectations. By the quickness of his perception, the promptness of his decisions, and his generous devotion to his patients, he inspired them with reliance on his skill, and gratitude for his endeavors. There was a merit in this connection, which he possessed in its fullest extent. He never betrayed professional confidence. To his intimate friends, concerning all that related to his own affairs, he unbosomed himself with the most perfect unreserve; but in the most unrestrained intercourse with these, he never even hinted at any knowledge acquired through his position as physician, which he might not publicly have proclaimed to all the world. In consultation with his juniors, Dr. Brinckl\u00e9 was kind and

courteous, and ever regardful of professional etiquette; and in giving an opinion based upon greater experience or more acute observation, a proper degree of respect and deference for the preconceived notions of his colleague, was always entertained.

The circle of Dr. Brinckle's acquaintance was a limited one; but by those who knew him well, he was highly appreciated. Dignified and gentle in his manners, he inspired all with respect; modest and reserved in his deportment, he never failed to impress favorably all with whom he came in contact. In all the better qualities of manhood, he was, perhaps, as near faultless as is often permitted to human infirmities. Entirely free from selfishness, to do good to others was the greatest pleasure of his life. He would submit to any inconvenience, endure any labor, and encounter any peril to serve those whom he esteemed; and just in proportion as he was always ready and anxious to advance their interests and secure their happiness, he shrunk from anything in the way of service to himself which seemed to require the slightest exertion, or involve the slightest sacrifice of ease on the part of others. With this pervading element of his character, there was mingled a truthfulness and integrity rarely equalled. He was utterly incapable of deception, and was never known to be guilty of what the most unfriendly judge could pronounce a mean action. His code of honor, as regarded his own duties, was a strict and exacting one; but he fulfilled all its conditions. Punctiliously observant of his engagements, that which he undertook he always performed, no matter what obstacle might stand in his path. To his sterner virtues, he joined great tenderness and delicacy of feeling; and an amiable and chivalric disposition combined, made him at once humane and courteous, compassionate and resolute. He was, in short, just, generous, honest, faithful, cheerful, and earnest-hearted, and his life was in conformity.

Dr. Brinckle was a man of high intellectual mark. The rich soil of his mind had been diligently cultivated; he had great aptitude for learning; and possessing an unusually retentive memory, the information he had acquired was always available. His taste was nice and discriminating: in miscellaneous literature he was well read; and he delighted especially in the old English poets, from whom he was often wont to make quotations applicable to the circumstances which surrounded him.

The friends of Dr. Brincklé were ardently attached to him; they knew and valued him. Seldom have we seen so many of the nobler qualities of man centred in a single individual. He has passed from our midst; "the dust hath again returned unto the dust;" but his virtues remain engraven upon the hearts of his friends, never to be effaced, until each, in his turn, shall have succumbed to the great destroyer; and, having taken a lasting leave of the things of time, is preparing to cross the threshold of eternity.

Dr. B. H. COATES inquired whether the Fellows of the College present had observed that the prevailing cholera was preceded by the premonitory diarrhœa, with the same regularity as in 1832 and 1849. He had not witnessed, in his private practice, any case in which all the symptoms considered as characterizing the malignant Asiatic cholera were present; but had seen a very unusual number of cases of short and sharp cholera morbus with cramps, of diarrhœa with cramps, and of vomiting with cramps. Very few of these, as far as he could learn, had been preceded by diarrhœa; and none, as he could find, by a copious and liquid diarrhœa. The diarrhœas he had seen, had appeared to him to be well-marked cases of bilious diarrhœa, such as is common in this country; and he had seen some dysentery. In all the cases, he had not been able to get to see a specimen of the rice-water discharge; although he believed it to have been present in three of them. In two diarrhœas, he had witnessed a total absence of bile for a short interval; in one case, twice; but the discharges were not liquid.

Dr. Coates had been informed by Dr. Campbell, the resident physician of the Almshouse, that less than half the cases of oriental cholera which occurred in that institution in this year, had been preceded by liquid diarrhœa; and that the symptom, more frequently observed at the commencement of the disease, had been the appearance called "washerwoman's fingers," sometimes dark colored.

Dr. B. S. JANNEY had been consulted by Dr. C.; but had not noticed any marked distinction between this and former years.

From these facts, and from the subsequent course of the present discussion, Dr. C. considered it proved—

That the present epidemic was not uniform in these particulars; and,

That the cases of cholera, without premonitory diarrhœa, must be very frequent.

Dr. C. urged that this was of great importance, as the public confidence had become deeply fixed in the possibility of preventing cholera by curing diarrhœas; and that this had been confirmed by an official publication of the British Government; and that the startling and melancholy loss of several eminent citizens by the present pestilence, might justly give rise to the fear that valuable lives may have been sacrificed by undue dependence on this warning.

Dr. C. believed that creasote, after the method recently recommended in Dr. Hays's journal [by Dr. Cormack, No. 53, Jan. 1854, p. 223], was the most useful single remedy of all that he had tried. He had directed the patients to take a single drop first, triturated in ʒss of mucilage; and only to repeat it if the burning sensation were not too severe, in half an hour; but in every instance they took the second drop, and pronounced it comforting.

Dr. C. also cited Dr. Campbell for the repeated occurrence of cholera immediately after removing two separate sections of a wooden house.

Dr. RAND stated that cases of cholera had occurred in the prison, which were preceded by constipation.

Dr. WILSON JEWELL remarked, that he was in possession of a few statistics of the cholera epidemic, as it had appeared in our city the present season, which, he believed, might throw some light upon the subject under discussion. These, however, he would premise by stating that he did not think there was any marked difference in the manner of attack and the symptoms between the disease as it now existed and that of 1832 and '49.

His connection with the Board of Health had afforded him an opportunity of witnessing many of the cases that were reported, and he had been careful in his inquiries as to their origin and premonitory symptoms, and found that a large majority of them had been preceded by diarrhœa for several days. Nor was it less frequent that imprudence in living had much to do with the production of the disease in many of these cases.

The Dr. observed, that the first cases which had come to the knowledge of the Board of Health, occurred between the 13th and 19th of June, ult., among some laborers employed in discharging cargo from the ship Chaos, at Almond Street wharf. These men, for several days previous to the 13th, had been mixing raw sour oatmeal with the water they drank. The oatmeal was a part of the remains of the ship's stores. This ship was last from Liverpool, with 320 passengers, but had had no sickness during the voyage, with the exception of one man who died from hemorrhage of the lungs. The condition of the ship was clean.

Of these cases, nine in number, the first two, who sickened between the 13th and 15th, recovered. Those who were attacked on the 16th, in all six, and one on the 17th, died within twelve hours, with unmistakable evidences of cholera asphyxia.

During the interval, however, between the 13th and 18th of June, there were three other cases reported to the Board, from widely remote sections of the city, two of which terminated fatally. One of these happened on the 15th, a patient of Dr. Given, in the vicinity of Pine and Nineteenth Streets, who recovered. Another was in Kensington, brought on from imprudence in diet and wilful exposure, which terminated fatally in five hours. These two were draymen, who did business along the wharves. The third case was a German, who died within eight hours, living in Front near Noble Street, who worked on Noble Street wharf. This man had diarrhœa preceding his attack of cholera.

On the 19th, a woman of intemperate habits, living in Louisa Avenue, Union Street, near Front, the wife of one of the laborers on board the Chaos that were taken sick on the 13th, and who recovered, having nursed her husband, was attacked with cholera and died in five hours.

The next place from which reports came to the Board of Health, was in the Moyamensing Prison, on the Passyunk Road, where, between the 20th and 26th of June, eight cases of cholera occurred—six on the women's side, and two in the men's department. The first case was that of a woman who had been in the cells for three weeks. Four of these cases terminated fatally within a few hours of the attack. The first man attacked was in a cell directly opposite the cell of the first case on the women's side, on the same floor, ground tier—a yard of forty feet or more

intervening between the two buildings. A number of cases of diarrhœa were distributed over the house, occurring principally among the prisoners in the ground and second tier of cells.

Dr. Jewell informed the College that, from this period, June 26th, the reports of cases not only increased in numbers, but were brought from various and wide apart sections of the city—insomuch that up to this date, August 1st, a period of seven weeks since its first appearance, there had been reported to the Board of Health 411 cases.* Of this number, 165 came from the Blockley Almshouse Hospital, 8 from the County Prison, and 15 from localities not named. The remainder were reported from various districts of the city as follows:—

Kensington,	66	Spring Garden,	18
City proper,	44	Richmond,	10
Northern Liberties,	85	Penn District,	7
Moyamensing,	19	Mantua Village,	5
Southwark,	18	Tacony,	1

The Doctor proceeded to show that a large majority of these cases came from districts bordering on the river front, and in close proximity to the wharves and docks into which the sewer drainage of the city empties, and that those from Kensington, constituting 27 per cent. of all the cases reported, exclusive of those from the Hospital and County Prison, were from localities unpaved, badly graded and drained, or in the midst of a crowded population, notorious for their want of domestic cleanliness, and surrounded with pigsties and ponds of stagnant water.

It had been impracticable, the Doctor observed, to present any exact percentage of the deaths from cholera since its outbreak in June, as the physicians have not reported their fatal cases at the Health Office. The nearest approximation to the truth, under this head, was to be gathered only from the weekly bills of mortality passing through the office. By these statistics he learned, that 245 deaths had been reported from cholera asphyxia, amounting to a fraction over 50 per cent. of all the cases reported, which, under the circumstances, the Doctor thought to be a large and

* The whole number of cases of cholera reported to the Board of Health, from June 13 to October 25, a period of nineteen weeks, amounts to 639. Of these, 208 were from the Blockley Almshouse Hospital. W. J.

unfair proportion to the cases which had really occurred, owing to the fact that many physicians did not report their cases at all, while others only reported their fatal cases.

Of the 165 cases from the Blockley Hospital, 83 had proved fatal. In this institution, the Doctor stated, the disease had proved very fatal, particularly among the aged of its inmates, carrying them off in a few hours from its onset, and in many instances before any proper treatment could possibly be adopted. Here the cases were very generally preceded by diarrhœa, which forerunner was kept a profound secret from the nurses and physicians—for fear of being removed to the cholera wards—until the fatal crisis had arrived. The first appearance of the cholera in this hospital, was in the night, and between the 9th and 10th of June. Fifteen cases occurred during the night and following day.

In answer to a question by the President, Dr. J. replied that, with scarcely an exception, the cases he had seen in the practice of others were attended by a premonitory diarrhœa, varying in duration from three or four days to a week.

In his own practice, he had seen no cases of collapsed cholera, but had prescribed for, and attended a large number of diarrhœa cases, many of which, he believed, would have passed into cholera had not timely aid been administered. These cases he regarded as the result of a specific poison, contained in the atmosphere.

He had found no difficulty in controlling the diarrhœa, whether the discharges were feculent and bilious, or light colored, watery and yeasty, or accompanied by slime and blood. As a general rule, he believed the precursory diarrhœa to be almost a characteristic evidence of the approach of cholera; but, as in former epidemic seasons so in this, he had met with several cases which seemed to be ushered in by sudden prostration, vomiting and purging of a serous fluid. One case in particular, to which his attention had been called, the accession of the alarming symptoms to a state of entire prostration were almost simultaneous. The patient, in whose statement every reliance might be placed, informed the Doctor, that, up to the time of the invasion of the disease, he had been in good health and without any symptoms of diarrhœa; in an instant he became giddy, sick, faint, with severe cramped pain in his abdomen and a copious discharge of a serous, milky fluid from his bowels, three of which took place within an

hour; his pulse was feeble and fluttering, his extremities cold and suffused, with a clammy perspiration. Under immediate and proper care, his more violent symptoms were relieved in an hour or two, and reaction speedily followed. Another case, precisely similar in its onset, symptoms, and duration, had come under the Doctor's notice.

Dr. REMINGTON stated that he prescribed with very satisfactory results, in severe cases of cholera attended with cramps and rice-water discharges, a combination of strychnia and chloroform. He gave the following formula:—

℞. Strychniæ, gr. i; chloroform, ʒi; tinct. opii camph., ℥i; tinct. krameriæ, ℥ss; spts. lavand. comp., ℥ss; aq. camphoræ, ℥ii. M. Sig. Dose—a teaspoonful every half hour.

Every case of cholera which has fallen under his notice, has been preceded by diarrhœa. He ordered a teaspoonful every half hour, and after relief was obtained, to give the medicine at intervals of one, two, and three hours. This treatment was conjoined with a warm sinapism to epigastrium, and small pieces of ice frequently administered, which contributed largely to allay thirst and tranquillize the stomach. To maintain the horizontal posture, and to carefully abstain from copious draughts of water and other liquids. The ingredients in the above formula were varied to meet the indications that presented, but were generally adhered to, and found to be highly efficient in arresting the cramps, vomiting, and purging. His patients all recovered.

Dr. WEST remarked, that he had seen two cases of ordinary cholera morbus in which the skin of the fingers was shrivelled, but without any other symptom of cholera asphyxia. The discharges from the stomach and bowels were bilious.

Dr. C. D. MEIGS stated that he had never seen a case of cholera asphyxia which was not preceded by diarrhœa of longer or shorter duration.

Dr. Meigs gratefully acknowledged the honor conferred by his re-election to the office of Vice-President of the College.

The College adjourned.

Stated Meeting, Sept. 6, 1854.

DR. C. D. MEIGS, Vice-President, in the chair.

Present, thirty-three Fellows.

The Committee of Publication reported that No. 5, Vol. II. N. S. of the *Summary of the Transactions* had been issued.

The following donation to the Library was received:—

Principles of Physiology, by W. B. Carpenter, M. D., T. R. S., &c. &c. A new American edition, from the fourth and revised London edition, 8vo.; Blanchard and Lea, Philadelphia, 1854. Presented by the editor, F. G. Smith, M. D.

Dr. MASON read the following

CASE OF RUPTURE OF THE UTERUS, IN WHICH THE OPERATION OF GASTROTOMY WAS SUCCESSFULLY PERFORMED BY JOHN NEILL, M. D., SURGEON TO THE PENNSYLVANIA HOSPITAL.

Monday, 24th of July, called to Mrs. John McDevitt, South above 20th Street, in labor with her sixth child; reached her at 9 P. M.; had been in active labor for about an hour; of a florid complexion, somewhat fleshy, large muscular development, with all the appearance of possessing a constitution of more than ordinary strength and vigor.

Upon examination, found the os uteri about half open, membranes presenting unbroken, the head to be felt high up above the superior strait; the pains were good, but by no means violent, with distinct remissions of five or six minutes; left her, and returning in about an hour, found the os uteri fully open, pains somewhat stronger, but still the presenting part did not descend. I now ruptured the membranes in the expectation that, as there was neither contraction nor rigidity, the head would come down into the pelvis without further delay. In this I was disappointed, and it was evident that the head had some difficulty in entering the superior strait. Still it advanced a little, and I thought I

could detect the anterior fontanel looking towards the left acetabulum, giving the fourth position of Baudelocque. I was however by no means certain on this point, but resolved to wait. I made a visit in the next street, and returned to the patient in less than half an hour; the pains were now much stronger, and I thought that the head had advanced slightly. At this time Mrs. M. was obliged to get up, for the purpose of relieving her bowels, and I went down stairs, still without the slightest anxiety as to the result of the labor, for the spirits were good, the countenance cheerful, the woman well formed and vigorous, and a state of active labor had not existed for more than two hours and a half.

While at stool, the patient had two pains; during the latter she suddenly complained of intense agony, with a burning sensation in the right side; the woman hurried her to bed, and called me into the room; I found her on her back in great torture, which she assured me was no longer the pain of labor, but that something had gone wrong inside of her.

I examined her pulse and found it but little altered; this, added to the circumstance of there being neither vomiting nor cold clammy skin, nor anything like an approach to syncope made me hope that matters were not so bad as I had at first apprehended; but after administering some forty drops of laudanum, using hot fomentations, and waiting for some time, finding that the uterine contractions were completely suspended, that the presenting part had receded, and that there was a sanguineous discharge, though not profuse, from the vagina, I felt convinced that the uterus was ruptured.

Before, however, proposing any operation, I called upon Dr. Hollingsworth for his advice and assistance. He immediately came in the kindest manner, and after careful investigation, the diagnosis was distinctly made out. The placenta had *not* passed into the cavity of the abdomen, for it could be distinctly felt with the cord passing from it. The head of the child could be detected through the abdominal parietes occupying the lower part of the abdomen on the right side, near the inguinal region, but no portion of it remained in the uterus.

Under these desperate circumstances, we deliberated with sad forebodings on the treatment to be adopted, in order, if possible, not to lessen the little chance of life remaining. I am aware that

all the best authorities recommend introducing the hand through the torn womb, into the bowels of the victim, seizing the feet, and first dragging the infant back into the womb, and from thence, per vias naturales, into the world. They say that it gives the child a better chance; it may be so, I am not prepared to dispute that point, for I thank God I have had no experience in such a procedure; but this I do know, that the description of the operation has always filled me with unutterable horror.

Another thing, which I am bound to confess, though it may appear very unprofessional and unnatural to some, is, that I never thought of the child or its life, or anything about it, except to wish, that as it had pleased God to place it there, it would please him, in his infinite mercy, to assist me in getting it away, without tearing the poor devoted woman to pieces, and entailing upon myself the terrible conviction, that I had made almost certain death a certainty.

After due consideration, however, we determined to explain the nature of the necessary operation, by turning to the patient, and propose it as a dernier resort. This we did, but she absolutely refused to submit to it; and, from the hydrocephalic condition of the head, afterwards ascertained, we had reason to be thankful that she did so. At this time there was no vomiting, the expression of her countenance was good, the pulse firm, and the skin natural; the pain in the abdomen, at first very severe, had now much abated; and after administering a powerful dose of morphia we left her, determining to see her in the morning, and then be guided by circumstances.

Next morning, the 25th, when Dr. Hollingsworth and myself visited her, we found her much better than we anticipated; pulse firm and strong, countenance bright and mind unclouded; longer to leave her undelivered was out of the question; professional duty and common humanity alike demanded that an effort, however desperate, should be made to save her. We, therefore, determined to propose gastrotomy, as that operation, in our opinion, afforded her the best chance. To this, encouraged by feeling better than she anticipated, she at last consented; and, after consulting Dr. Neill, who undertook the performance of the operation, it was determined on.

Operation by Dr. Neill.—The patient was placed upon a stout table covered with blankets, her shoulders and head supported by pillows; and, as a preliminary step, about four ounces of ether were administered by inhalation. The incision was made in the linea alba, commencing about two inches below the umbilicus, and extending towards the pubis full six inches. The moment the opening was made, large quantities of mingled blood and clots escaped, the omentum seeming saturated with blood, and both the visceral and parietal peritoneum being deeply stained. A dead child's back presented, its head lying low down towards the right groin, its feet to the left. It was immediately removed, and found to be hydrocephalic; the bi-parietal diameter of the head measuring, I should suppose, six inches, the occipito frontal probably seven. Its entire weight I should judge to be not less than ten pounds.

The rent in the uterus appeared to be enormous, and perfectly uncontracted, for the operator passed both hands through it, right down into the organ, and, as it were, scooped up the placenta, with all the coagula within his reach. Upon the removal of his hands, the womb instantly contracted to about the size of a man's fist. The blood, fluid as well as coagulated, was then removed from the cavity of the abdomen as far as practicable, disturbing the viscera as little as possible. The incision was then closed by five sutures, and afterwards by long adhesive straps, leaving an opening at the lower part of the wound to favor the escape of fluids; a compress and binder completed the arrangement.

The patient's strength was less exhausted than could have been anticipated; spirits good; pulse 120—firm and equal. The time occupied by the whole operation did not, I should think, exceed five minutes. In half an hour she was placed in bed, and an enema of laudanum administered; grain doses of opium were directed to be given by the mouth every three hours, in order to keep her, if possible, in a perfect state of repose, and prevent any action of the abdominal viscera; at the same time the system was supported by nourishing fluids, beef tea, &c.

Shortly after the operation, the patient began to vomit a greenish watery fluid, which continued several hours, but was checked by the exhibition of small quantities of brandy with ice; the

opium treatment seemed to agree with her, for she slept, and complained of but little pain.

On the morning of the 26th I visited her in company with Dr. Hollingsworth. Found her tolerably easy; mind cheerful; tongue clean and moist; pulse 120; the abdomen was tympanitic, and very much distended; the breathing much embarrassed by the accumulation of gas. Ordered her to continue the opium pills, and to have an injection containing turpentine.

On making my evening visit I learned that the bowels had been slightly opened, and that she had passed large quantities of flatus, by which the tympanitic distension of the abdomen was much lessened; breathing easy and natural; pulse rapid and weak. Directed brandy to be continued with the opium.

27th and 28th.—Continued in much the same condition—occasionally vomiting.

On the 29th Dr. Neill visited her with Dr. Hollingsworth and myself. Removed the stitches from the wound, which was healthy and closing extremely well; she was now ordered milk punch, ad libitum.

At this time there was a very copious, dark, offensive discharge from the vagina, which was kept continually syringed with warm water and soap. The bowels had been moved once copiously; pulse 120; tongue moist, but slightly furred. The patient looked so hopeful and strong, that we began to feel encouraged.

On the morning of the 30th I understood that she had passed a restless night. Looked very much worse; the lips were pale; countenance dejected; pulse 130; vomiting of green matter without effort, in fact a regurgitation of the fluids contained in the stomach.

I began to lose hope. Still her mind never wavered—day nor night—and when spoken to she replied quickly and clearly, but without anything like an unnatural elevation, a condition which I have sometimes observed in bad cases of uterine phlebitis. The discharge from the vagina was less copious and less offensive.

When I saw her in the evening, she was laboring under the worst possible symptoms; so much so, indeed, that I thought it possible she might die before the morning. Her pulse was from

135 to 140—very weak; her feet and legs were cold, also the lower part of the belly; her wrist and arms to the shoulders in the same condition, and bedewed with a clammy sweat.

I confess I regarded her as moribund, and the priest in attendance told her that she was dying, and must make her peace with God; the poor woman replied that she would make her peace with God most willingly, but that the Revd. Father was wrong, that she was not dying yet, she did not feel like dying. And as it proved, she was right, for the next morning, the 31st, I was agreeably surprised to find that her skin had regained its natural temperature, that her strength had improved, and that she was altogether better than on the previous day. There was no pain on pressure of the abdomen, but still there was considerable tympanites, and the pulse continued at 135.

On the first of August the vomiting continued, but only occasionally.

On the 2d, vomiting had ceased entirely. I watched with great anxiety for a diminution in the frequency of the pulse, as indicating some favorable change, but as yet in vain.

Notwithstanding the steady pursuance of the opiate treatment, the patient's bowels, on the 1st, were largely opened, three or four times. She complained of great pain, before each evacuation; opiate enemata checked this, and on the 2d she had but one stool, perfectly natural in color, and of the consistence ordinarily produced by a dose of castor oil.

August 3. Pulse somewhat slower—about 120; dressed the wound in the abdomen; did not think it looked quite so well; some discharge from one of the suture openings: was suffering from great uneasiness of the bowels, they having been opened several times; before each movement, considerable pain was complained of, somewhat resembling the tormina of dysentery; color perfectly natural. In the evening, there again appeared great coldness of the extremities. Ordered an enema of starch and laudanum, with hot bricks to the legs and feet, brandy and milk to be given freely.

On the 4th, found the patient warm; pulse 130; tongue foul; complaining of great pain in the bowels, which had been moved several times during the night; the breathing high and labored. Both Dr. Neill and myself thought her prospect of recovery worse

than usual. Dr. Hollingsworth had left town, and I was obliged to be absent from the city for some hours; Dr. Neill, therefore, undertook to see her for me. In the evening, I found her symptoms the same as in the morning. Ordered her a large teaspoonful of laudanum, as an injection, and desired the attendant to give her all the nourishment she could take, with a continuance of the brandy and milk.

Saw her, with Dr. Neill, on the morning of the 5th. Breathing decidedly improved; countenance and spirits better, though the pulse was weak and continued at 130; tongue cleaning; dressed the abdominal wound, which looked much healthier, though there was considerable discharge from another of the suture wounds; had passed a comfortable night, slept well, and had had no pain nor trouble with her bowels; but there had been a considerable discharge from the womb, described by the nurse as being of a clear red color, and devoid of smell.

At half past nine in the evening, saw her again. Condition unchanged; pulse the same; uterine discharge still copious; bowels had been opened once.

On the 6th, found her much improved; pulse 120; tongue clean; expression of face natural; heat of skin almost natural, with very little thirst; the abdominal wound nearly healed. In the evening, found her easy, but showing more weakness. This I attributed to the uterine discharge, which continued copious.

Morning of the 7th, stronger and better; pulse 110; discharge from the womb much lessened; had slept soundly all night. At ten o'clock, evening of the same day, great change had taken place; pulse 100, firm and steady; uterine discharge nearly suppressed; had taken her food regularly, and with appetite; bowels had been opened once naturally during the day.

From this time, she improved so rapidly that, on the 15th, she came down stairs; on the 24th, just a month from the time of the rupture, was at the washtub; and, on the 2d of September, I met her in the street, when she told me she felt as well as she did before the accident.

The treatment of this fatal and distressing accident has been the subject of much difference of opinion among the learned in the obstetrical art; some advocating immediate delivery by version or by the forceps, when practicable, or by gastrotomy, while

others have expressed themselves in favor of leaving the patient entirely to the recuperative powers of nature, contenting themselves by recommending their pupils to make no effort at delivery, but merely to combat symptoms as they arose; and any one who takes the trouble to read Dr. Trask's valuable monograph on the subject, with his series of cases (see *Amer. Journ. of Med. Sciences*, January and April, 1848), will find that each mode of practice has occasionally succeeded.

But the object to be gained by a numerous array of cases with their results, is a knowledge of the mode of management the least likely to increase the danger, and, therefore, the most likely to eventuate in recovery. It is now pretty generally conceded, that the chances of this fortunate result are materially promoted by speedy delivery; either by turning, by the forceps, or by gastrotomy, according to the peculiar circumstances attending each particular case.

To the zeal and industry of Dr. Trask, of Brooklyn, we are indebted for the accumulation and results of 303 cases, comprising rupture from mechanical violence; rupture occurring during gestation, and rupture at the full term; rupture likewise in every degree of severity, partial or complete—in some instances not involving the peritoneum, and in some cases confined merely to the neck of the womb.

In this series, there are 128 recoveries.

The following table shows an evident preponderance of fortunate results in favor of gastrotomy.

	Saved.	Lost.
Gastrotomy	18	7
Undelivered	18	50
Other modes of delivery . .	28	51

Dr. Trask makes the following remarks on these results:—

"We wish to be distinctly understood, that we do not consider that our statistics afford us the actual proportion of recoveries and deaths after the respective modes of treatment.

"Few are ambitious to publish unsuccessful cases, and hence the reason of so large a proportion of successful terminations as our series exhibits. But we see no reason why such apparent success should follow gastrotomy, were not its results in reality,

in the main, more satisfactory than that of the other modes of delivery. A degree of *eclat* attaches to its performance, even if it be unsuccessful, far more than to the application of the forceps, to perforation, or to version; therefore, there can be no causes tending to suppress the publication of unsuccessful cases of gastrotomy, which do not apply in an equal and even greater degree to the other modes specified." With equal truth, it may be observed that the proportion of recoveries in 303 cases—viz: 128—must not, in this fatal accident, be taken even as an approximation to the true proportion of deaths and survivals. We ourselves know of three cases of rupture of the womb, occurring in this city, which have never been reported, and, by making inquiry among the members of the profession, we have no doubt but that many more could be found. The reasons for this silence are obvious. Many are so much engaged that they cannot, or will not, give the time for drawing up a careful report; others, particularly those practising among the lower orders of the community, are afraid of the blame which might, on such an occasion, attach, however unfairly, to themselves; and cases, no doubt, have occurred where the accident has not been detected during the life of the patient, and where a *post-mortem* has not been sought by the physician, or, if requested, has not been granted, and the case has been certified simply as one of sudden death during labor, from exhaustion, disease of the heart, pulmonary coagula, shock, syncope, &c. &c.

But these statistics, though useless as a means of estimating comparative results, are, by the accumulation of so many cases of recovery, highly useful and important. They prove the perfect fallacy of the old doctrine, maintained by such high authority as that of Hunter, Burns, and Denman, that the most humane course was to leave the patients undelivered, and trust entirely to the resisting and recuperative powers of nature. They prove incontestably, what Dr. Dewees has so earnestly asserted, viz: that the do-nothing advocation is opposed to the best interests of humanity; for such cases, so treated, have almost invariably perished, while they demonstrate, beyond the possibility of cavil, that immediate delivery, by one means or another, has frequently succeeded under the most desperate and unpromising circumstances.

On the subject of delivery, or non-interference, Dr. Trask gives us the subjoined results:—

"Of 154 cases delivered by artificial means, 97 died, 57 survived.

"Of 89 abandoned undelivered, 65 died, and 24 survived.

"Of 31 delivered by natural efforts, 20 died, and 11 survived; and these include, in both instances, cases of rupture of the os, in which the peritoneum was not involved.

"Of 6 in whom artificial delivery was tried and failed, all died undelivered.

"A comparison of those delivered by art and of those abandoned undelivered, yields 37 of the former, as saved, to 27 of the latter in the hundred, showing that the chances in the former case are considerably better than in the latter."

In looking over some of the periodicals, we have collected the following additional cases of ruptured uterus, published ulterior to the date of Dr. Trask's memoir:—

Cases of rupture of the uterus have recently been reported by Mr. Brownhill, *Prov. Journal*, Dec. 29, 1849, and by Dr. Smallwood, U. S., *Brit. Amer. Journ.* Jan. 1848. Both were fatal. Mode of treatment not mentioned.

Two cases of rupture of the uterus are reported by Dr. Mitchell. In the first, one leg had escaped into the abdomen; the child was extracted, and the woman recovered under large doses of opium.

In the second case, the escape of the child was complete; gastrotomy was performed after the mother's death, but it is not stated whether the child was saved, though it may be inferred that it was not.—*Obstetrical Record*, No. 13.

A case of recovery after ruptured uterus is also recorded by Dr. Coley. In this instance, the fœtus, with the exception of the head, had escaped into the peritoneal cavity. The narrator states that he introduced his hand through the rent, and, seizing the feet, dragged the body back into the uterus, and so delivered the child.—*Ibid.* No. 11.

Dr. Simpson also describes two cases of rupture depending on hydrocephalic fœtuses, and alludes to the frequent connection between the two conditions. In confirmation of this, he states that, out of 74 cases of intra-uterine hydrocephalus, collected by

Dr. Keith, rupture of the uterus occurred in 16. He further insists on the necessity of immediate delivery when the fœtus is ascertained to be hydrocephalic, and advises puncture of the cranium with a trocar rather than craniotomy.—*Monthly Journ.* June, 1848.

A case of recovery from rupture of the womb is reported by Mr. Church, in the *Lancet*, May 29. The child was extracted dead; the mother made a good recovery.—*Ranking's Abstract*, Jan. 1849.

A case of extreme rupture is reported by Mr. Long. The child was completely thrown into the cavity of the abdomen. Gastrotomy was performed after some little delay. The operation was borne well, but the woman sank, and died on the third day. No *post-mortem* permitted. Notwithstanding the magnitude of the injury here sustained, Mr. Long was convinced that, had the patient enjoyed the benefits of a regulated temperature, and the other advantages of regular attendance which a hospital might have supplied, she would have survived.—*Dublin Medical Press*, April 17, 1850.

Mr. Stobo has recorded an instance of recovery after rupture of the uterus. The nature of the accident was indisputable, as the author felt the intestines through the rent. No mention is made of the child; we therefore conclude that it did not survive. —*Medical Times*, April 6, 1850.

A remarkable, and, perhaps, unique example of rupture of the uterus is narrated by Mr. Stolty, in which the entire ovum escaped into the abdomen at full term. The woman died of hemorrhage.—*Gazette Médicale de Strasbourg.*

On motion, permission was granted to Dr. Mason to publish the case in the *Medical Examiner*, as having been read before the College.

Dr. R. P. THOMAS related the following case of "abscess of the kidney connected with caries of the last dorsal and two upper lumbar vertebræ," and deposited in the Museum the pathological specimens which he exhibited.

RENAL ABSCESS.

The morbid specimen here exhibited, was obtained from a man aged thirty-three years, who was accustomed to laborious occupation. The statement, made by himself, was, that about two months ago, while making a heavy lift, he experienced a sensation of "something giving way" in his left side. Immediately thereafter, his health, which had previously been slightly impaired, rapidly declined without any obvious cause. His flesh and strength wasted; there was a constant dull aching pain in the left lumbar region, with occasional stitches of a more acute character; and a tumor was gradually developed near the spine. On the eleventh of August, I visited him with his attending physicians, Drs. S. P. Brown and James V. Emlen, at which time the emaciation was extreme. The tumor was slightly elevated, about four inches in its longest diameter, and occupied the space on the left side of the spine between the last rib and the crest of the ilium. Fluctuation was evident, yet the sensation communicated to the finger induced me to believe that the collection of matter was under the erectores spinæ muscles, and, of course, impinging on the abdominal cavity. The spine in the lumbar region presented a well-marked curvature towards the right. The patient had hectic fever, and a slight cough; but no purulent expectoration, nor any appearances, as Dr. Brown thought, of pus in the urine. Having learned thus much of the case, I positively refused the man's earnest solicitations to open the abscess; but, upon consultation with my colleagues, it was determined to gratify his wishes so far as to make an exploratory puncture. A very narrow bistoury was passed obliquely under the skin, and cautiously through the erectores spinæ nearly to the depth of an inch without reaching the abscess. Believing the collection of matter to be associated with diseased vertebræ, I made no further attempts to evacuate it. A few days subsequent to my visit, the patient began to expectorate pus, and in two weeks he died of an exhausting diarrhœa.

Post-mortem 24 hours after death. Body much emaciated; abdomen slightly tympanitic; omentum injected, covered with a plastic exudation, and feebly adherent to the intestines. The heart, right lung, right kidney, stomach, and in fact all the abdo-

Stated Meeting, Oct. 4, 1854.

Dr. WOOD, President, in the chair.

Present, fifty-two Fellows.

Dr. HOLLINGSWORTH was appointed Secretary *pro tem.*

Dr. MORRIS, a member of the Committee appointed to provide medical aid for the inhabitants of Columbia, Pa., stated that the Committee, on their arrival at that place, had met the resident physicians, and that certain sanitary measures were agreed upon and published. Means were also adopted for obtaining supplies for the place. The prevailing affection presented no peculiar features.

Dr. MORRIS also presented a letter, conveying the thanks of the Sanitary Committee of the Borough of Columbia, to the College for the prompt and efficient aid afforded them.

Dr. JOSEPH PARRISH was duly elected a Fellow.

Dr. COATES presented a Clock to the College, for which a vote of thanks was returned.

The following letter was then read:—

PHILADELPHIA, *Sept.* 21, 1854.

DEAR SIR: The Government having suddenly required my services officially in the Pacific Ocean, I am forced to resign the post of Secretary of the College of Physicians which I have had the honor to hold for a brief period.

The Records, &c., in my hands, I have confided to the care of Dr. Hollingsworth.

With an earnest desire for the prosperity of the College, as well as of its Fellows,

I am, with great respect,

Your obedient servant,

W. S. W. RUSCHENBERGER.

Dr. GEO. B. WOOD,
President, &c.

Dr. RUSCHENBERGER'S resignation having been accepted, it was, on motion of Dr. F. G. SMITH, unanimously

Resolved, That the thanks of the College be presented to Dr. RUSCHENBERGER for his efficient though brief services, and that,

they hereby express their regret at the loss they have sustained. The College then proceeded to elect a Secretary, and the Tellers (Drs. NEILL and PAGE) reported that Dr. ALFRED STILLÉ had been duly elected.

Dr. NORRIS read the following history of a

CASE OF FRACTURE OF THE NECK OF THE HUMERUS, WITH DISLOCATION OF ITS HEAD.

T. B., aged thirty-two, was admitted into the Pennsylvania Hospital, October 31, at mid-day. He was under the effects of liquor when admitted, and stated that on the previous night he had received an injury of his shoulder by falling down a flight of stairs. On examination, the soft parts around the left shoulder were found to be very much contused, swollen, and discolored, by effusion of blood; the extremity was readily movable in any direction, but the slightest motion produced exquisite pain. No perceptible depression was noticed below the acromion; the elbow could be brought close to the side without force, and on raising the arm and moving it for the purpose of examination, the grating of a fracture was felt.

The presence of these symptoms led to the belief that a fracture of the neck of the humerus existed, and the case was treated by means of a pad in the axilla, with a pasteboard splint moulded to the shoulder on the outside of the arm and bound to the body, with the forearm supported by a sling.

This treatment was continued till the 26th of November, the dressing being occasionally changed. On the removal of the dressings at the last-mentioned date, the swelling having by this time almost entirely disappeared, it was discovered that the head of the bone had been thrown from its socket into the axilla. At the first glance, I thought that my original diagnosis had been incorrect, and that, in fact, I had mistaken, and had been treating a dislocation for a fracture, but, upon closer examination, it proved that such was not the case, but that both a fracture and dislocation existed. The appearances presented by the parts at this time, were as follows:—

To the eye there was evidently a slight vacuity immediately below the acromion process, though there was not that deep depres-

sion which exists in uncomplicated luxation. On rotating the arm, the broken shaft of the humerus was perceived to move under the acromion at the same time that the rounded head of the bone could be easily felt in the axilla, and the distance of this fragment from the upper end of the shaft, which partially occupied the glenoid cavity, was, as nearly as could be ascertained, from two to two and a half inches. The shoulder was not firmly fixed as is commonly seen in luxation, particularly when the member has been kept quiet, as was the case under examination; but, on the contrary, was easily movable, and when the patient stood erect, the elbow came in contact with the side of the chest. In order to prevent any mistake as to the nature of the accident, I requested my colleagues in the hospital to visit the case, and, after careful separate examinations, they all agreed as to its being one such as I have mentioned, viz: of fracture of the neck of the humerus conjoined with a displacement of its head into the axilla.

In consequence of the comparatively good use of the limb, which the patient seemed likely to attain, and the slight probability there was of the head of the bone ever being replaced, together with the risk of giving rise to severe inflammation about the joint, and consequent firm anchylosis, if any attempts at reduction were tried, it was decided that no efforts to replace it should be made. Gentle frictions to the part with passive motion to the shoulder, after all traces of the great contusion and consequent inflammation which attended upon it had been subdued by a state of rest, was the treatment afterwards resorted to, and the patient left the hospital on the 1st of January, with a strong and useful extremity, but with inability to elevate the arm beyond an obtuse angle from the body.

The dislocation of the head of the humerus which accompanied the fracture of the neck of the bone in the above case, it will be observed, was not at first detected, although the seat of injury was carefully examined. The accompanying swelling and contusion of the soft parts, the distinct crepitus of a fracture felt upon handling the limb, and the other marked symptoms of that accident which it presented, together with the absence of the ordinarily marked ones of luxation, viz: the fixity of the extremity, the hollow at the shoulder below the acromion, and the ease with which the elbow was brought to the side of the body, all caused

it to be overlooked. The difficulty of diagnosis in connection with the great rarity of the injury, alone makes the case worthy of notice; but, in addition to this, the proper plan of treatment to be pursued in these accidents, supposing the diagnosis to be made out, does not seem to be well determined by surgeons.

In the professed treatises on Injuries of the Bones, of Sue, Petit, Boyer, Smith of Dublin, and the recent valuable, but still unfinished work of Malgaigne, no mention is made of luxation, accompanied with fracture of the neck of the humerus, and but few cases of it are to be found detailed in any of our surgical records. Delpech, in his *Chirurgie Clinique* (tom. i. p. 241), furnishes an accurate account of the dissection of an injury of this kind, which was observed by M. Houzelot, but it had not been ascertained during life. Dupuytren has reported a single case which he saw at the Hôtel Dieu, which was not reduced. In 1832, an instance of it was witnessed in the service of Mr. Earle, of London, which was replaced by his dresser a short time after the accident had occurred; and two cases are to be found in the *Journal de Chirurgie* (tom. iv. p. 180), which are very accurately described by Peyrani, neither of which were reduced. In the last edition of Sir Astley Cooper's *Treatise on Dislocations and Fractures of the Joints*, but five cases of a similar nature are noticed. Of these five, the character of the accident was not discovered in three of them, until revealed by *post-mortem* examinations. In a fourth, the fracture was comminuted, and no attempts at reduction were made, and the fifth, which was an injury of six weeks' standing, and observed in Guy's Hospital, in 1834, by Sir Astley himself, in conjunction with Mr. Key, was mistaken for an ordinary luxation, and the fracture was not suspected till after the pulleys had been applied, when, its true nature becoming apparent, all further efforts to reduce it were desisted from.

In an experience of twenty years at the Pennsylvania Hospital, where a very large number of accidents are treated, I have known of but one other instance besides that just given, of the occurrence of this injury. This was observed in my service, in 1842, and in it the head of the bone was happily reduced by the resident, Dr. Edward Hartshorne, who published an account of the case in the *Medical Examiner*. The patient was a young circus rider, whose shoulder had been injured by a severe blow from a horse; and

the head of the bone, in this instance, was thrown forwards under the clavicle. It was reduced without difficulty, by a little manipulation with the hand, while the patient was feeble and relaxed, and a good cure followed.

In regard to the treatment to be pursued in these cases, I have stated that surgeons are not well agreed. Delpech, after inspecting the parts in the patient of Mr. Houzelot, reasons upon it, and concludes that the reduction of the head of the bone in these accidents is impossible. Sir Astley Cooper (p. 427, Lond. 1842), thus expresses himself: "Extension is of no further use than to bring the broken shaft of the os humeri into the glenoid cavity, where it forms a useful articulation; but no extension, however violent, disturbs the broken head of the bone, for no proper force could bring it into the glenoid cavity of the scapula"—"let the surgeon do what he will, the head of the bone will probably remain in the axilla, and the upper motions of the arm will be in a considerable degree lost." Dupuytren says: "When luxation is accompanied with fracture of the surgical neck, art and nature can do almost nothing." (*Leçons Orales*, tom. iii. p. 116.) We have seen, however, that in two of the instances I have alluded to, success has followed the efforts made to thrust back the head of the bone into the glenoid cavity, and these should lead us, I think, to make some efforts to accomplish it in all cases when seen early, though, for the reasons already mentioned, I should myself be disinclined to attempt it, except when it is very recent, and then by no other force than such as can be exerted by the pressure of the hand.

Dr. WALLACE exhibited two anatomical models made of leather, by Mr. Schmidt, of 8th St. below Chestnut.

A proposition (58) for Fellowship was read.

The College adjourned.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM NOVEMBER 1, 1854, TO FEBRUARY 7, 1855, INCLUSIVE.

Stated Meeting, November 1, 1854.

Dr. WOOD, President, in the chair.

Present, thirty-four Fellows.

Dr. MEIGS communicated a letter from Dr. A. Clarkson Smith, chairman of a meeting of the physicians of Columbia, Pa., returning thanks to the College for their assistance during the recent epidemic of cholera at that place.

Dr. MEIGS presented to the Library the following work: *On the Nature, Signs, and Treatment of Childbed Fevers: in a Series of Letters addressed to the Students of his Class.* By Charles D. Meigs, M.D.

Dr. PEPPER read the following case:—

On the 22d of March, 1844, a little girl, aged eighteen months, whilst playing on the floor, was suddenly seized with a violent spasmodic cough, threatening strangulation. The mother recollected that the child had been amusing itself with an uncooked grain of coffee, and immediately suspected that it had been swallowed and was the cause of all the difficulty. The room was carefully searched, but the grain could not be found; and this but

confirmed the mother's conviction. Dr. Maris saw the child an hour or two after the accident; she was then in a disturbed sleep, with hurried breathing and suffused face; in a few moments she was aroused by a return of the same agonizing cough and spasm. Various expectorants were now administered, but without relief; and the remissions and exacerbations of the cough continued to recur every few minutes.

After an interval of about six hours, I was requested to see the child; but found her so much oppressed and restless, that it was almost impossible to auscult with any degree of accuracy. The respiratory murmur on the right side was exceedingly feeble, and, in a great measure, masked by loud sonorous râles, whilst on the opposite side the murmur was unusually loud; throughout the entire chest, the percussion was perfectly natural. The history of the case, confirmed by the physical signs, left but little doubt as to the nature of the accident, and tracheotomy was accordingly proposed. This, however, was rejected by the father, under the impression that the symptoms might be owing to some other cause, and in the hope that, even if our fears were well founded, the coffee-grain might be spontaneously expelled. Upon several occasions, when the violence of the cough indicated that the grain had been driven into the larynx, the child was inverted, in the hope that gravity might assist in its expulsion; but this expedient only tended to increase the alarming symptoms, and was therefore abandoned. From this time, I did not see her until the early part of August, 1847, a period of more than three years. Dr. Maris, however, informed me that, a few weeks after the accident, the paroxysms of cough gradually became less violent and of shorter duration, whilst the intervals were much longer, lasting sometimes for several weeks, during which the child was comparatively comfortable, and gained both flesh and strength, but never entirely free from difficulty of breathing. Finally, hectic fever and purulent expectoration set in, and she became greatly emaciated. Upon examination, I now found dulness on percussion over the lower part of both lungs, but particularly on the right side, and the respiratory murmur throughout was completely masked by loose mucous râles; the prostration, however, was so great as to preclude the possibility of a more extended examination. From this time she gradually sank, and finally became comatose, and

died on the 24th of the month—just two weeks after my last visit, and about three years and five months from the time of the accident.

The body was examined the following day. Upon opening the thorax, care was taken to remove both lungs, with the trachea, larynx, and œsophagus adherent, without incising these parts; gentle pressure was now made with the finger along the course of the trachea, from below upwards, until the larynx was reached, when the grain of coffee was seen to escape from the chink of the glottis. It, apparently, had undergone no important change from its long stay in the air-passages: it had not materially increased in bulk from absorption of moisture, as might have been expected, nor was it even coated with pus, mucus, or other animal matter, and its usual color was well preserved; upon the application of considerable force, it could, however, be slightly flexed. The mucous membrane of the larynx and trachea was thickened, minutely injected, and coated throughout with tenacious muco-puriform matter; and this condition of things extended throughout the bronchial tubes, as far as examined. At the bifurcation of right bronchus, the membrane presented a worm-eaten appearance, and was much softened, though not absolutely ulcerated. The entire right lung was hepatized, and about one-half of the left lung, at its lower part, was in a similar condition. No abscess or tubercular degeneration existed in either lung, nor were there any pleuritic adhesions.

The condition of the right bronchus, at its bifurcation, renders it highly probable that the foreign body was lodged the greater part of the time at this point. The chronic inflammation of the left bronchus and lung may have been owing to an extension of the inflammation from the right side, where it undoubtedly first commenced; or it may have been induced by the occasional lodgement of the coffee-grain in the left bronchus, after having been driven into the trachea or larynx. Judging from the size of the foreign body, compared with the caliber of the bronchus at the tender age at which the accident happened, it is highly probable that the air must at the first have been almost entirely excluded from the right lung; and this must have been still more the case when lodged in the left bronchus, owing to its comparatively small size. It has been admitted by all observers, that

when the foreign body is irregular in shape it is more apt to become permanently fixed in the bronchial tubes, and at the same time to interfere less with the respiratory movement, than when it is round or oblong, and thus completely plugs up the tube, as was the case in the present instance; and this fact fully explains the great fluctuations in the symptoms.

In communicating the above case to the College, I am fully aware that it presents nothing of very unusual occurrence; at the same time, it appears to me that all such accidents are exceedingly interesting and instructive, particularly since there still exists some discrepancy of opinion as to the proper course to be pursued under such circumstances. Numerous instances are on record of foreign bodies lodged in the air-passages being discharged spontaneously, as in the act of coughing, or when the glottis has been relaxed by the attention being diverted by some interesting subject—the larynx being, as it were, taken by surprise. Dr. Duncan, in the *Northern Journal of Medicine*, reports the case of a man who had suffered four years with pulmonary irritation, resulting from the lodgement of a splinter of bone, *apparently*, in the left bronchus; during a violent paroxysm of cough, it was finally expelled, and he soon regained his health. In the *London Medical Gazette*, vol. xliii., Dr. Webster refers to an instance where a piece of bone, the size of half a hazelnut, was impacted in the lung for the period of fourteen years and nine months, and yet the patient entirely recovered after its discharge. Quite recently, I saw a little child who had been suffering for several months with chronic pneumonia and hectic fever, as the result of one of the deciduous teeth having slipped into the larynx, and finally becoming fixed in one of the bronchial tubes; this case also rapidly recovered after the accidental discharge of the foreign body. Other similar cases might be mentioned; they, however, form but exceptions to the general rule, since, in the vast majority of them, the patient either dies suddenly from spasm of the larynx, lodgement of the foreign body in the chink of the glottis, or, at a more remote period, from organic disease of the lungs and air-passages.

Dr. Stokes, in his monograph on the subject under consideration, though in the main highly in favor of the operation of tracheotomy, admits that we may wait a reasonable time in those

cases where the foreign body is much smaller than the glottis during expiration, of a smooth surface and round form, and not likely to increase in bulk by remaining in the air-passages, in the hope that it may be discharged spontaneously or by the use of emetics. But when we bear in mind that the act of vomiting is attended by a forcible inspiration, it is evident that the emetic treatment is based upon false physiological notions. More may be hoped for from the use of sternutatories, since, during the act of sneezing, the air is driven through the larynx with great rapidity and force. But these violent commotions are not unattended with danger, since death may result from the sudden impaction of the foreign body in the glottis. In the *N. W. Med. and Surg. Journ.* (May, 1849), Dr. Hansford, of Knoxville, Ill., reports the case of a colored girl, having a pin lodged in the windpipe, who was promptly relieved by resorting to the following expedient: She was directed to lie upon a bench, face downwards, with the head projecting over the edge, and to take a deep inspiration, so as to distend the lungs; a smart blow on the back with a pillow, made hard and firm by compression, had the desired effect, and the pin was at once expelled from the larynx. Since then, he states that the "maul" has been successfully used by him in expelling water-melon seeds, a grain of corn, and at another time a large glass bead. The principle upon which this procedure is based is certainly a correct one, and merits further trials. In many instances, where the foreign body is heavy—as a piece of coin—inversion has been resorted to, in the hope that gravitation might effect its exit. This was faithfully tried in the memorable case of Mr. Brunel, but without success until after opening the trachea. A similar expedient was made by Samuel Solly, Senior, Assistant Surgeon to St. Thomas's Hospital, in the case of a man who swallowed a pebble weighing 114 grains, which finally became impacted in the first division of the left bronchus, and caused extensive disease of the lungs and death.

Seeing, then, that the expectant plan of treatment, errhines, emetics, inversion, and other means above alluded to, cannot be relied upon, it is generally agreed that an early resort should be had to tracheotomy as the most certain means of saving the life of the patient. When the foreign body is lodged in the larynx or trachea, threatening instant suffocation, the operation cannot

be for a moment delayed; and even when the symptoms are not so urgent, delay is dangerous on account of the serious mischief which generally results from the long-continued irritation. In those cases, however, where the foreign body has descended into the bronchial tubes, the propriety of the operation is by no means so clear; when the substance is but small, and from its shape and character productive of but little local or constitutional disturbance, it certainly would be most prudent to trust to the efforts of nature for its expulsion, or, at most, to those simple measures above alluded to. Even these latter are, however, of doubtful utility; for supposing that by them the body should be driven into the larynx, it is evident that violent spasms would be induced and life endangered. It is true, under the last-named circumstances, the body might at once be removed through an opening into the trachea; but, in the particular class of cases now alluded to, it would hardly be justifiable to subject the patient to such a contingency—particularly when we bear in mind that foreign bodies have occasionally remained in the lungs for many years without any material injury. Within the last few weeks, I have examined the case of a little girl supposed to have a piece of filbert shell lodged in the lungs; the physical signs, as well as the previous history, render it highly probable that such is really the case; and yet, although it is now about one year since the accident, the general health is but little if at all impaired, the only inconvenience being a slight occasional cough. Royer Collard met with the case of a lunatic, at Charenton, who swallowed a nail an inch and a half long, with a large head. On examination after death, it was found sticking in the left bronchus. The lung was not injured, or only slightly inflamed; but the nail was very much oxidized, and covered with an animal matter, the centre of it being still hard; thus proving that the foreign body had remained a long time in the lungs. The same author reports another case, in which a piece of bone was lodged in the bronchus for the period of six years without causing any inconvenience during the life of the patient, and unattended by any pathological condition of the lung, as revealed by an examination post-mortem. These cases are certainly exceptional; but still we can readily understand that, under the favorable circumstances before alluded to in a previous part of this communication, a foreign body might remain for an

indefinite time in the lung without exciting any serious inconvenience, and in which consequently any surgical interference should be considered as *meddlesome* and unjustifiable.

In another class of cases, the foreign body for a time remains in the bronchus without causing any very urgent symptoms; but at irregular intervals, varying from a few days to several weeks, it is forced up into the trachea and larynx, and, by exciting chronic inflammation or violent spasm, endangers the life of the patient. When such symptoms supervene, it is clearly the duty of the surgeon to interpose and open the trachea. Such was the case reported this evening; for although at times the child, in a great measure, regained its health, yet throughout it was subject at intervals to violent attacks resembling croup, until finally the continued irritation ended in double pneumonia and death. During the progress of this case, it is highly probable that the coffee grain at times settled into the left bronchus, though more commonly into the right, owing to its larger dimensions, and still more to the important fact mentioned by Dr. Stokes, "that the projection or septum dividing the right and left bronchi is not in the mesian line, but decidedly to the left of it; so that a body, passing through the glottis, will be thus directed into the right bronchus." In this view of the case the operation of tracheotomy was urged upon several occasions, but was rejected by the parents for reasons already mentioned.

Occasionally, owing either to the character of the body or to the constitutional peculiarities of the patient, the foreign substance, though permanently fixed in the lungs, becomes a source of constant and severe irritation, sooner or later endangering the life of the patient. Under such circumstances, several very important questions present themselves. At times, the body thus impacted excites ulceration or even an abscess in the adjacent parts, by which process it finally becomes detached, and may be expectorated; this, very probably, was the case in regard to the tooth above alluded to, which was spontaneously discharged after having induced considerable disease in the lung; but so fortunate a result could hardly be anticipated where the body was of large dimensions. Shall the case then be abandoned as hopeless, or is it the duty of the surgeon to endeavor to extract the foreign body by forceps introduced into the bronchus through an opening in

the trachea? Liston, in one instance, in this way succeeded, after considerable difficulty, in extracting a bone from the right bronchus of an adult, and I believe it is one of the few successful cases on record. By auscultation, we can generally determine which side the body occupies, but it cannot be possible to ascertain its exact depth or locality; and even if reached by the instruments, it may be so coated by mucus or other secretions as to completely conceal its true nature and prevent its being recognized by the surgeon, or it may have become so impacted by a thickening of the mucous membrane as to prevent its extraction, even supposing that it could be properly seized. Another great difficulty in manipulating in such cases must be the violent spasms provoked by the introduction of the instruments. To overcome this last-named difficulty, Dr. James Warren, of Boston, recommends the free use of ether; and chloroform has also been suggested with the same view. Brodie, though he admits that the operation may in some rare instances be necessary, insists that the forceps must be used with the greatest possible caution, on account of the important nerves and bloodvessels which must be endangered by any forcible efforts; and surely, when all sensibility is destroyed by anæsthetics, one of the chief safeguards of the patient is removed, since vital parts may be seized without any intimation being afforded to the surgeon. It would appear then that he must indeed be bold who would undertake an operation so hazardous and difficult; and yet without it, the patient must, in many instances, submit to a painful and lingering death.

The diagnosis of foreign bodies in the air-passages or lungs, is oftentimes attended with considerable difficulty; particularly in cases of children who cannot yet speak, or who have not sufficient intelligence to point out the nature of the accident. If the child is known to have been playing with small beads or beans, or such like substances, the violent and sudden spasmodic cough, threatening asphyxia, will naturally be ascribed to the accidental lodgement of one of these bodies in the larynx; and such is generally the history in these cases. But, owing to the unfaithfulness of nurses or carelessness of mothers, this early stage may have escaped detection, and the physician is only summoned when the foreign body has passed into the lung. The little patient now only suffers with a slight hacking cough, some difficulty of breathing, and an

occasional paroxysm closely resembling spasmodic croup, during the intervals of which it not unfrequently resumes its playthings. Without any previous history, how readily might the character of the case be misunderstood, and yet how important that the physician should be early apprised of its real nature! The foreign body occasionally excites pain under the right or left clavicle, according to its locality, but even this symptom is frequently absent, and appears to depend more upon difference in sensibility than upon the character of the body. Boyer, and some other writers, attach considerable importance to emphysema of the cellular tissue at the root of the neck, as being more or less characteristic of the accident under consideration. It is quite conceivable that the violent spasmodic cough might occasionally cause a rupture of the air-cells, and thus allow an escape of air into the interlobular cellular tissue, and thence through the anterior mediastinum into the inferior part of the neck; but this condition is by no means peculiar to the lodgement of foreign bodies in the air-passages; and, indeed, according to Dr. Stokes, seldom accompanies this accident.

More certainty as to the real nature of the affection may be afforded by auscultation than by the general symptoms; but even this will not always enable us to arrive at a positive conclusion. When the respiratory murmur throughout a portion of the lung is either very feeble or entirely extinct, and these stethoscopic signs alternate with the symptoms of violent and sudden laryngeal irritation and spasm, the presumptive evidence is that a foreign body is the cause of the difficulty; and the probability is still further increased when the physical signs exist on the right side, whilst on the opposite, the murmur will be supplementary or puerile. When the foreign body has remained in the air-passages for some time, various râles are generally developed, as the result of the long-continued irritation; and, for reasons already stated, are most frequently observed at the upper portion of the right lung. When the body is of an irregular form and thin, as in the case of a piece of nutshell, it may become firmly wedged in a bronchial tube without very materially obstructing the passage of air; so that the physical signs more or less characteristic of the nature of the accident would scarcely be developed. On the other hand, it occasionally happens that a mass of tough mucus

or a membranous exudation from time to time obstructs one of the bronchial tubes, and thus diminishes or destroys the respiratory murmur throughout a certain portion of the lung. Hence, it would appear that much caution is necessary in interpreting the above signs, since, to a certain extent, they may exist without the presence of any foreign body, or may be absent when in reality such body is impacted in the lungs.

In not a few instances, the diagnosis has been embarrassed by the preconceived views of the attending physician as to the possibility of bodies beyond a certain size entering the larynx. Much, however, must depend upon individual peculiarities, since it is well known that the length of the glottis varies from half an inch to an inch in different persons of the same age and sex. In the case of the little child reported at the beginning of this communication, though the foreign body was not very large, yet it must be considered as comparatively so when we bear in mind the early age at which the accident occurred. When the chordæ vocales are widely expanded, and at the same time a strong column of air rushes into the trachea—as occurs during the rapid inspiration and expiration in the act of laughing—bodies far exceeding the apparent size of the glottis have entered the air-passages. The case, however, is very different with regard to the escape of bodies from the larynx, even when they are of comparatively small dimensions. Jobert, in his experimental researches upon this subject, states, as his belief, that a foreign substance, the size of which exceeds four lines in all directions, cannot be expelled by the sole efforts of nature. He also mentions, as the result of direct experiment, that, even upon dead bodies, foreign substances of but small dimensions are expelled with great difficulty from the air-passages when aided by the impulse derived from a considerable volume of air, and that consequently the difficulty must be greatly increased during life by the very active resistance of the constrictor muscles of the glottis; he therefore concludes that there are but few instances in which tracheotomy can be dispensed with. No allusion has been made to the manner in which this operation should be performed, as this strictly pertains to the province of surgery; I may, however, state that when once indicated, in case of a foreign body, the risks are but few in comparison with the same operation in mem-

branous croup, since, in this last-named affection, there is not only a local, but also a constitutional disease to contend with, one of the chief peculiarities of which is the constant tendency to membranous exudation at every new point of irritation. Under all circumstances, the dangers and difficulties of this operation must be greatly increased in early infancy, owing to the small size of the trachea, shortness of neck, and comparatively large amount of adipose matter, which usually exist at this period of life.

Dr. JACKSON related the case of a child, in whom subcutaneous emphysema of the neck was produced by a cherry-stone lodged in the lungs.

Dr. CONDIE stated that he had recently examined an analysis of all the cases on record of foreign bodies in the larynx, and found that in the majority of them the foreign body was sooner or later expelled; but, when permanently retained, death often occurred from inflammation or tuberculosis. When an operation was performed for its removal, its discharge was accomplished either by the forceps or the scoop, or by the strong expulsive action of the lungs. But even then, in most cases, death followed. Nevertheless, Dr. C. was of opinion that this chance of escape should be afforded to the patient. Dr. C. alluded also to death arising from spasm, independent of the physical closure of the passage by the foreign body.

Dr. RAND inquired whether, when the foreign body was metallic, it might be possible to effect its solution by inhaling or otherwise introducing into the economy chemical solvents, such as the vapors of iodine, nitrous acid, &c., properly diluted. He conceived that their gradual action might ultimately cause the destruction of the foreign body.

Dr. JACKSON related the case of a girl, twelve years of age, who suffered from an attack of obstinate remittent fever, which resisted all modes of treatment adapted to that disease. At length, a fragment of a glass bead was coughed up from the lungs, and the fever ceased. Some months afterwards, pulmonary hemorrhage took place, and frequently occurred for the space of

several years. Meanwhile, there was often a muco-purulent expectoration. The patient grew up, and is now above twenty years of age, and, although she has the aspect of robust health, she occasionally suffers from severe attacks of cough, with copious expectoration.

Dr. NEILL related a case of internal strangulation of the bowel, exhibited the anatomical specimen, and made remarks upon the mechanism of this form of disease.

Dr. WILSON presented a specimen of the plant and of the essential oil of the *Erigeron Philadelphicum*, and read the following notes of several cases of uterine hemorrhage successfully treated by the use of the latter:—

Mr. President: I have here a specimen of *Erigeron Philadelphicum*. It is an indigenous plant, growing abundantly in the fields around about Philadelphia, and has been used as a remedial agent for a long time, and, of course, is familiar to the members of the College. It is, however, the oil of the *Erigeron Philadelphicum* to which I wish to call the attention of the College for a few minutes. It is very extensively used and highly extolled by the eclectic physicians, as a remedy in various diseases—diarrhœa, dysentery, hæmoptysis, hæmatemesis, menorrhagia, uterine hemorrhage, &c. &c.

It is of a light straw color; is very limpid; has a peculiar aromatic, not unpleasant, odor, which is extremely persistent; its taste is peculiar, mild, and not very pungent. Professor Procter, who has examined it, informs us that its density is very low, being .845; it is very inflammable. It begins to boil at 310° Fahr., and continues to increase in temperature to 365°; showing that there are two volatile oils in association. The amount of oil yielded is extremely small.

My attention was called to it in January last, by Dr. A. C. Bournonville, as a remedy in uterine hemorrhage. He informed me that he had used it in some few cases, and wished me to try it. I have prescribed it in many cases, and very generally with decided advantage. The following are a few of those of which I kept notes:—

1. Mrs. E. W., residing in Adams Street, east from Thirteenth

Street. I visited her in January, 1854. She was 44½ years old, pale, weak, with loss of appetite; scarcely able to be about house; had been unwell for five weeks, for the last five days very bad. Gave her 5 gtt. every two hours. She was entirely well in thirty hours.

2. Mrs. H. W. had miscarried at the sixth week of utero-gestation; flooding had continued for ten days after the expulsion of the ovum. Gave her 5 gtt. every two hours. She was entirely well in forty-eight hours.

3. Miss F. D., St. John Street, above Poplar Street, aged 21 years; stout, muscular woman; pale, weak, loss of appetite, &c.; had been unwell for thirteen weeks, using from four to six napkins daily during most of the time. Gave her 5 gtt. every two hours during the day. She was entirely well in twelve days. She went about her house during the treatment, but was restricted to light work.

4. Mrs. S., South Fourth Street, had miscarried at the tenth week; was a large, stout, healthy woman, about 37 years old; the hemorrhage was very much controlled by the use of this medicine.

5. Mrs. R., Marshall Street, above Master, had been unwell for ten weeks, many days so bad that she was compelled to go to bed. Gave 5 gtt. every two hours. She was entirely well in four days.

I have also prescribed it in some cases of irritation of the bladder, with great relief.

Having understood that the article has been prescribed by several physicians during the last few months, I should like to know the result of their observations.

Dr. H. HARTSHORNE read the following note on the succession of phenomena in etherization:—

INFLUENCE OF ETHER ON THE NERVOUS CENTRES.

A recent judicial occurrence has given a new interest to the inquiry: "In what order of succession does ether affect the centres of sensation and voluntary motion?" If an authoritative answer can be given, so as to establish a positive general rule—however affected by occasional exceptions, it may exert an important influence upon medical testimony. If it be established,

for example, that sensation *first* disappears under anæsthesia—the volitional and motor centres being subsequently, with however slight an interval, affected; or, if it be proved that the functions of sensation and voluntary motion are *simultaneously* arrested—that of mobility never being *antecedently* depressed or checked; or, if it be even undoubtedly asserted that sensation can never be relied on, being always obscured and partial, in such a stage of anæsthesia as overcomes muscular power; in either of these cases medical evidence must tend to invalidate testimony, such as was recently made the basis of conviction in a criminal trial. To apply the principle, without hesitation: If voluntary motion is never arrested by ether so long as consciousness of sensible impressions exists, it will be impossible for a woman to give valid testimony to the commission of a rape upon her while under the influence of ether, and not otherwise restrained; because that crime implies compulsion or fraud overcoming or eluding resistance—which resistance would be possible, upon the supposition cited, so long as knowledge of occurrences existed.

Without having made any extensive reference upon the subject—in fact, knowing of but few sources capable of supplying scientific data in regard to it—I may quote an author usually remarkably accurate in expression and opinion.[1] Treating of anæsthesia, he says that chloroform "does not depress the excited reactivity of the motional centres, but disables the sensitive centres from becoming media of stimulation to them." Again, including *both* chloroform and ether under the one head of "*this class of agents*," he repeats that it is only "if the anæsthetic influence be *intense*," that "the cerebro-spinal motional centres become depressed by it." In these words are expressed exactly the impression which my observation of the effects of ether has induced. But my experience has not been extensive with its use. So far as I have noticed, the order has invariably appeared to be—first, annihilation of *pain;* then of special and ordinary sensation; *then* of all evidence of consciousness and will. I may mention one case at least, in which a patient, who was suffering the cauterization of some large and severe chancres, himself directed the operation while taking ether; notifying me of the

[1] Prof. Simon, in his Pathology, p. 164, Am. ed.

moment when insensibility to pain had prepared him for the touch of the caustic, and when to intermit its use as sensation returned. In view of possible future litigation, no less than from its general pathological interest, I trust that this question of the succession in which anæsthesia from ether affects the different centres of nervous function, may be, at no distant time, settled by the recorded expression of experience, materials for which undoubtedly exist in the observation or within the knowledge of members of this College.

It is probable, as a general principle, that *no* narcotic, or other agent, is capable of producing *acinesia*, or loss of voluntary motion, without, in at least an equal degree, impairing sensation. Even as the result of central disease, acinesia without anæsthesia is extremely rare. "We are not aware," says Dr. Bennett, "of any recorded case in which the voluntary motion was completely abolished, while the sensibility in the motionless part was perfect." (*Lib. of Pract. Med.* art. *Paralysis.*) Sensation is stated by this and other authorities to be always *perverted*, if not destroyed, in paralysis of motion.

Opium affects sensation and movement together. Alcoholic intoxication first dulls the senses, before motion, also, is lost in stupor. Belladonna only affects the condition of muscles and motor nerves when it has first hypnotized the sensory centres with which they are connected. The protoxide of nitrogen, when breathed, usually *excites* the motor function, so as to place it beyond the control of the will. Is there any agent which reverses this effect, without first annulling sensation?

The accounts given of instances of *trance*, so called, in which individuals have lain with perfect interior and exterior consciousness, and yet incapable of any movement, are legendary. If they do occur, it must be from *central disease*, affecting the corpora striata, probably; which rarely happens, without involving, functionally at least, the thalami also. In nightmare, we have no external sensation at all; the distress of the attack arises from subjective impressions, altogether erroneous.

The motor function may be considered as *primary*, *subordinate*, *antecedent*—in comparison with sensation. Certain animals display contractile movements, which give no evidence of sensation. Reflex movements, under well-developed nervous centres, occur

prior to sensation, in the order of ascent and development; and reflex motions persist longer than sensory impressions, even in man—as in the instance, now familiar, of motion produced by tickling the sole of a paralytic's foot.

There is a reason for this order of antecedence and succession, in the provision afforded by it for the protection of the individual. This, as an *à priori* consideration, must have the force only of a confirmatory argument; but it may certainly have this effect—joined with the facts already adduced—to show that *artificial acinesia*, or loss of motor power, *never occurs, unless anæsthesia has preceded, or accompanies it.*

Stated Meeting, December 6, 1854.

Dr. Wood, President, in the chair.

Present, thirty-four Fellows.

The Committee of Publication reported the issue of No. 6, Vol. II. N. S., of the *Transactions*.

A proposition (59) for Fellowship was presented.

The following donation to the Library was received from Dr. F. G. Smith:—

A Systematic Treatise, &c., on the Principal Diseases of the Interior Valley of North America, &c. By Daniel Drake, M. D. Edited by S. Hanbury Smith, M. D., and Francis Gurney Smith, M. D.

Dr. Coates made some remarks on the utility of milfoil (*achillæa Millefolium*), in hemorrhage.

Dr. Coates stated that he had used an infusion of achillæa millefolium, sometimes popularly called milfoil and yarrow, with material advantage, in several cases of hemorrhage; two from the kidneys, three (in the same subject) from the uterus, and one from the lungs. He apprehended that the vegetable astringents were too little employed in this country. The infusion was taken without encountering any particular repulsiveness; and, as it seemed to him, rather strengthened than disordered digestion.

Without a vegetable astringent, he should have most probably employed some more debilitating or deranging agent; for example—the acetate of lead. The formula was ℥ss of the herb, to Ibi of hot water; to digest 20 minutes, covered; the result to be taken cold, in the dose of half a teacupful every two hours.

He was induced to try this plant on the recommendation of Mr. Henry M. Zollickoffer; who remarked that its ancient reputation, and the celebrated name given to the genus, could hardly have been sustained without real usefulness.

Conversation having occurred among some of the members in the city, about the objections to be made to the term *angioleucitis*, Dr. C. took occasion to observe that there was no difficulty in making a regular word. This he proposed, from Liddell and Scott, *sub vocibus*, ἰχώρ and ὀρρός, or ὀρός. Ichorangitis or orrhangitis would be regular; and the latter the briefer. He had not seen these words. Ἰχώρ occurs in Homer, and, as it is said, in Aristotle and Hippocrates; the curious passage in Homer (*Il.*, v. 840), which describes ἰχώρ as the fluid which the gods possess in the place of blood, pronouncing them ἀναίμονες. Ὀρός occurs in Homer and Plato; and ὀρρός in Aristotle and Plutarch. There would seem a propriety in following the great naturalist, rather than the poet and the writer on abstract philosophy; and Plutarch is sufficient authority for the later Greek. The use of both these words for whey, serum of blood, and all animal fluids resembling serum, is perhaps quite as exact as any definition by modern chemists or physiologists.

Angioleucitis does not express *inflammation of vessels containing a white matter*, but, what is a nullity, *inflammation of white matter contained in vessels.* Lymphangitis is half Latin and half Greek; there is no parallel etymology in Greek; and lympha does not mean serum, but spring water.

Stated Meeting, January 3, 1855.

Dr. WOOD, President, in the chair.

Present, thirty-five Fellows.

The Library Committee announced the reception of the *Transactions of the American Medical Association*, vol. vii.

WILLIAM D. STROUD, M.D., and NATHAN L. HATFIELD, M.D., were elected Fellows of the College.

The Trustees of the Building Fund presented their annual report, as follows:—

REPORT.

The Trustees of the Building Fund offer their annual report to the College, as follows:—

At the time of their last report in January, 1854, there remained uninvested in their hands the sum of twenty dollars and thirty-two cents ($20 $\frac{32}{100}$).

Since that period they have received, in interest and dividends, six hundred and thirty-three dollars and sixty-eight cents ($633 $\frac{68}{100}$); an appropriation by the College of two hundred dollars ($200); and contributions from individuals amounting to one thousand three hundred and twenty-five dollars ($1,325); besides a certificate of preferred stock of the Schuylkill Navigation Company for sixteen dollars ($16), being a dividend on the preferred stock of that Company; the whole amount received in cash being *two thousand one hundred and fifty-eight dollars and sixty-eight cents* ($2,158 $\frac{68}{100}$).

With these sums, the Trustees have purchased two thousand three hundred dollars ($2,300), of the city six per cent. loan, at the cost of two thousand and forty-five dollars and twenty-five cents ($2,045 $\frac{25}{100}$).

Their account, therefore, will stand as follows:—

Amount on hand, January 1, 1854	$20 32
Whole amount of receipts in 1854	2,158 68
Making together the sum of	2,179 00
From which deduct the cost of investments made in 1854	2,045 25
And there remains on hand at this date	133 75

The following are the securities now belonging to the Fund, with their value at par; viz:—

Schuylkill Nav. Co.'s convertible mortgage loan . . .	$577 50
Schuylkill Nav. Co.'s preferred stock, eight shares at fifty dollars a share, and a fraction of sixteen dollars . . .	416 00
Schuylkill Nav. Co.'s common stock	51 00
Chesapeake and Delaware Canal Co.'s loan	545 16
Pennsylvania Railroad stock (four shares)	200 00
City six per cent. loan	3,900 00
City six per cent. gas loan	1,100 00
City five per cent. loan	4,800 00
City five per cent. gas loan	800 00
Spring Garden six per cent. loan	1,800 00
Penn District six per cent. loan	1,700 00
	14,889 66

It will be perceived from this statement, that the investments of the Building Fund have increased since the last report in January, 1854, at the par value, two thousand three hundred and sixteen dollars. If, to the amount of investments above mentioned, the cash on hand, and the interest and dividends now due be added, the Fund will amount, at the par value of the securities, to somewhat more than fifteen thousand four hundred dollars ($15,400).

In the present very unusually depressed state of the stock market, these securities would not command their nominal amount; but, as they are of the safest kind, being almost wholly upon the faith of the city of Philadelphia, there can be little doubt that they will hereafter be at par, and probably long before they will be wanted for the ultimate purposes of the Fund.

GEO. B. WOOD,
GEO. FOX,
JNO. RODMAN PAUL, } *Trustees.*

PHILADELPHIA, *January* 3, 1855.

The College then proceeded to elect, by ballot, a Librarian and a Library Committee, as follows:—

T. HEWSON BACHE, *Librarian.*
FRANCIS WEST,
SAMUEL LEWIS, } *Library Committee.*
D. PAUL LAJUS,

CURABILITY OF INTESTINAL PERFORATION IN TYPHOID FEVER.

Dr. WOOD made the following remarks on this subject:—

The Fellows of the College may perhaps remember that, on two occasions, I have called their attention to cases of recovery from peritonitis in typhoid fever, occurring under circumstances which rendered the supposition highly probable that perforation of the bowel had taken place. A notice of the two cases was published in the *Transactions* of the College, to which I would refer. (See *Transactions*, N.S., vol. i. pages 32 and 418.) In relation to one of these cases, I have scarcely entertained a doubt as to the existence of perforation; and in the other, it appeared to me in the highest degree probable.

Subsequently, I have seen an account of two fatal cases of typhoid fever with sudden peritonitis, which occurred in the Charity Hospital of Paris, and in which, upon the most careful examination after death, no perforation could be discovered. A notice of these cases may be seen in the *Medical Examiner* (N.S., x. 120). It cannot be denied that they tend to throw some doubt upon the reality of perforation, in the few cases which have been published of recovery from peritonitis in typhoid fever, supposed to have had this origin. But I have recently had under my care, in the Pennsylvania Hospital, a case of typhoid fever which, I think, affords satisfactory evidence of at least the possibility of recovery under the circumstances referred to; that is, where peritonitis has occurred in consequence of perforation of the bowel in that disease. To offer to the College a brief sketch of this case is the object of the present communication.

T. C., a young man, about 23 years old, was admitted into the hospital on the 21st of November. His friends stated that, three weeks before his admission, he had been attacked with a chill, and had been unwell ever since. At the time of his entrance, he had all the characteristic symptoms of typhoid fever in its advanced stage; among them, a pulse of 128 in the minute and very feeble, a perfectly dry tongue, muttering delirium, diarrhœa, and tympanitic abdomen with the rose-colored spots and tenderness on pressure. There was also cough, with embarrassed respiration and evidences of pulmonary congestion. He was put on the use

of oil of turpentine, and small doses of the blue mass, opium, and ipecacuanha, with emollient poultices to his abdomen, dry cups to his chest, and wine-whey, soup, and milk, to support his strength. On the 24th, his tongue had become moist, his abdomen less tumid and tender, and his pulse reduced to 115. So far as the fever was concerned, he seemed on the way to convalescence; but the pectoral symptoms had increased, and pneumonia was decidedly developed. The remedies were continued, with the addition of a large blister to his chest. But the pulmonic affection rapidly gained ground; the respiration was very much oppressed; the skin became cold and clammy, and the pulse extremely feeble; and life was sustained only by the administration of the most active stimulants. He died on the first of December, obviously of the disease of his lungs, the abdominal symptoms having almost entirely disappeared.

On examination after death, the upper half of the right lung was found in a complete state of gray hepatization, being everywhere infiltrated with pus, and so soft that the handle of the knife could be passed through it in all directions with very little resistance. The remainder of the right lung, and most of the left, were more or less congested. There could be no doubt as to the cause of his death. I was not present at the examination of the body; and, though the lungs and intestines were kept for my inspection, I had no opportunity of seeing the bowels in *situ*. Dr. Forbes, however, one of the resident physicians of the hospital, who made the autopsy, was kind enough to present me with the following account, in substance, of what he discovered on opening the abdomen.

Evidences of previously existing peritonitis were exhibited in small portions of semi-organized coagulable lymph adhering to the bowel and abdominal parietes, chiefly in the right iliac region, where, at one spot, it served to agglutinate the small intestine to the anterior wall of the abdomen. There was little or no liquid in the cavity, and no fecal matter. The adhesion was carefully separated by the thumb-nail, when a portion of the contents of the bowel escaped into the abdomen at the point of separation. On further examination, a perforation of the intestine was found in the middle of an ulcer, which appeared to be healing at its edges, as were several other ulcerated surfaces.

When exhibited to myself, the intestines were, as already stated, separated from the body, and had been laid open. A considerable number of healing ulcerated surfaces were visible along the ileum, in the situation of the aggregated glands; and, in the middle of one of these ulcers, near the ileo-cæcal valve, was an oval opening, about half an inch in length, quite through the bowel, with a smooth, rounded edge, which had certainly not been produced either by tearing or by the knife. There could not be the least doubt that it was a perforating ulcer. Near its edge, on the peritoneal surface of the bowel, was an adhering layer of semi-organized coagulable lymph, about an inch and a half in diameter, and here and there smaller patches, with some shreds adhering somewhat loosely to the bowel, at a little distance from the surface of adhesion, showing that the inflammation had extended some distance beyond the outer limits of that surface.

The College will, I think, agree with me in the conclusion that here had been a case of peritonitis from perforation, though of no great extent. Before any considerable portion of the intestinal fluid had escaped, adhesion had taken place around the opening by means of the exuded fibrin, and further mischief was thus prevented. The inflammation had probably begun to subside before the patient entered the house; and the 24th may be considered as the commencement of convalescence, so far as the peritonitis was concerned. I presume that the patient would have recovered, but for the supervention of pneumonia, which, in consequence probably of the general debility and bad state of the blood, passed very rapidly into the third stage, or that of suppurative disorganization.

If my interpretation of this case is correct, it proves pretty conclusively the possibility of a cure of peritonitis from perforation in typhoid fever, and supports, if it does not justify, the views taken of the pathology of the first two reported cases.

DEATH IN TYPHOID FEVER FROM INTUSSUSCEPTIO.

Dr. Wood also reported briefly a case of typhoid fever which had recently terminated fatally in the hospital from intussusceptio of the jejunum. The patient was a woman, and, though very ill, began to evince signs of amendment, when she was attacked with

vomiting, which nothing could permanently arrest. Anodyne enemata and a blister to the epigastrium had some effect in quieting the stomach, but only for a short time. Medicine and food were rejected, and she died at the end of about a week from the supervention of the vomiting, utterly prostrate, having been cold and almost pulseless for some days before death. The cause of the symptoms and the result were made plain upon *post-mortem* examination. Numerous ulcers existed in the ileum, but they were all in a fair way to recovery, and some had nearly healed. But in the jejunum, at no great distance from the duodenum, were two invaginations, one involving about two inches of the bowel, and the other from three to four inches, and in the latter some force was required to pull out the invaginated portion, which was remarkably white, as if deprived of blood. Inflammation had not taken place, perhaps in consequence of the low state of excitability of the parts. The probability is, that the intussusceptio occurred about the same time with the vomiting, and was the cause of it. The patient died of exhaustion, as nourishment could not reach a sufficient extent of bowel to permit an amount of absorption adequate to the support of life.

Dr. YARDLEY presented a thin caoutchouc bottle, furnished with a stop-cock and detached tube, which he had used successfully to arrest uterine hemorrhage by inflating it within the vagina.

Dr. MEIGS referred to the use of a similar instrument by Dr. Karl Braun, of Vienna, for the purpose of overcoming rigidity of the os uteri by dilating the vagina.

Stated Meeting, February 7, 1855.

Dr. WOOD, President, in the chair.

Present, twenty-eight Fellows.

Dr. W. D. STROUD and Dr. N. L. Hatfield appeared and signed the constitution.

Dr. T. H. BACHE, Librarian, read a statement of the condition of the library, announced the donation of seventy-three volumes and forty-three numbers of medical works and journals by Dr. A. STILLE, and of fifty volumes by Dr. S. LEWIS.

On motion, the Librarian and Library Committee were authorized to obtain, at the most reasonable prices possible, the volumes necessary to complete the set of the Sydenham Society's publications, and of such medical journals as may be deemed expedient, and further, to have bound such volumes as requires it.

The College then proceeded to elect delegates to the next meeting of the American Medical Association, to be held in Philadelphia in May next.

Drs. BIDDLE and T. H. BACHE were appointed tellers of the ballot, who reported the names of the following gentlemen as elected:—

J. RODMAN PAUL,	E. HARTSHORNE,
I. HAYS,	G. W. NORRIS,
G. B. WOOD,	FRANKLIN BACHE,
JOHN NEILL,	ROBERT A. GIVEN,
FRANCIS G. SMITH,	FRANCIS WEST,
BERNARD HENRY,	P. B. GODDARD.

On motion, the delegation was authorized to fill any vacancies which may occur in it.

Dr. H. HARTSHORNE read the following

CASES OF MENINGITIS.

There being hardly any class of diseases in which diagnosis and prognosis are more often obscure and difficult than in

affections of the brain in children, it would seem proper to record every fact which may contribute at all to their history; and especially, perhaps, such facts as deviate from what we had, *à priori*, reason to expect.

In the case first to be narrated, a deliberate prognosis, based upon medical authority, was completely falsified, in a manner which I cannot but believe to be somewhat unusual.

A strong predisposition, it should be mentioned, on the part of the patient, was proved to exist toward cerebral disease, by the facts that the child's grandmother has been for eight years hemiplegic after apoplexy; that one of her sons has been insane, and another died of a disease of the brain; that the child's mother died a few months since at the Pennsylvania Hospital, having been there under treatment for chronic mania; and that the elder brother of the patient, aged ten years, having attended the funeral of his mother, was attacked by a convulsion on the same day, and, in spite of prompt treatment, died in thirty-six hours.

H—— S——, the boy whose case I wish briefly to report—aged five years—had enjoyed tolerable health during the past summer, with the exception of occasional diarrhœa. Never, however, had he appeared to be a robust child. About the first of October, 1854, he became languid and peevish, with loss of appetite, and soon afterwards vomiting, with deranged character of the fecal discharges, and a tendency to costiveness, alternating with slight diarrhœa.

On the 9th of the month, he was brought to me, complaint being made by his nurse of his vomiting repeatedly through the day, and seeming fretful and miserable. His face was very pale, and lips bloodless. Some mild stomachic treatment was advised, the nature of the case not being then suspected.

The next day, pain in the head came on, with great restlessness; the forehead being hot, and pulse full and about 100. The vomiting continued; two dozen leeches were applied to the nucha, his bloodless aspect of the previous day, and other indications of an enfeebled condition, forbidding venesection. The leeches drew blood freely. Citrate of magnesia was directed, as the bowels were constipated. In the evening, the heat of the head was lessened, but opisthotonos had come on; the head was retracted so that he lay at times in a perfect arch, with the top of

the head upon the pillow; even during the short periods of his sleep, this unnatural contraction of the muscles continued.

On the morning of the 11th, as the citrate of magnesia had failed to operate, a laxative enema was administered. Through this day, the opisthotonos persisted, and the child lay without signs of intelligence, screaming and sleeping alternately; the cry being mostly sharp and not prolonged, the "hydrencephalic cry" of authors. His pulse had now become slow—and the heat of head was very moderate. On this evening a blister, four inches square, was made to vesicate the back of his neck.

The 12th found him with some temporary amelioration. The tetanic arch of the neck had partially relaxed. He was still indifferent and restless, however, especially at night, at which time some fever was said by his attendants to come on. Bowels costive—moved only by injection. Urine retained twenty-four hours, and very dark colored; warm fomentations and sp. æth. nit. dulc., were used for the relief of the retention. The great nervous excitement caused by the effort to overcome his resistance against medicine, deterred me from advising anything further at this time.

On the 13th, I find it stated on my notes that he appeared to be a little better. No decided alteration, however, occurred, and the night was much disturbed by his restlessness. Vomiting had at this time ceased. His nourishment was thin tapioca. The bowels still required movement by injection. During the 14th, 15th, and 16th, no important difference in his symptoms occurred; the costiveness, retention of urine, indifference through the day, and restlessness at night, being the leading symptoms. Pulse, at the time of my visits, about 80; head not hot.

On the 17th, eight days after I had first seen him, and about twice that interval since his first signs of indisposition, a violent *general convulsion* occurred, lasting fifteen or twenty minutes. Pediluvia, and cold to the head, were resorted to, and a hyoscyamus and assafetida mixture was given by the mouth. After the convulsion, the pulse was slow, the pupils dilated, and consciousness more obscured than before.

On the 18th, his nurse reports that he had during the night numerous convulsions, at intervals of less than half an hour. He screams frequently, and rolls from side to side. Eyes entirely

vacant in expression. The convulsions continued through this day in the same manner, affecting chiefly the left arm and leg, and the muscles of the face. The pulse at this time, and for the four following days, was slow and irregular; the irregularity being very strongly marked. The bowels and bladder were opened during the spasms repeatedly, and, when in the interval, involuntarily and unconsciously, in the bed. A warm bath was at this time employed, his resistance while conscious having interfered with it.

During the 19th, the same condition was maintained. His father told me that he had a spasm every fifteen minutes—but feebler. The right limb occasionally moves during the convulsion, but is motionless otherwise. Pulse has not lost its strength, nor irregularity. He refuses to swallow—or chokes when compelled to receive fluid into the mouth. No evidence, whatever, of sight or hearing exists; the breathing is almost stertorous, and gritting of the teeth nearly incessant. Through this night also the convulsions continued. I noted, in my memoranda, that he would certainly die, and gave nearly the same opinion in reply to inquiries of some of the family.

On the 20th, at my request, a renewed attempt was made to induce him to swallow, although the attendants declared that he could not open his lips. He was raised up, and drank a few teaspoonfuls. Some slight appearance of improvement in his aspect, with the subsidence of the convulsions, induced me to urge, although without any hope, the renewal of the blister. This was attended to; he was nourished with tapioca; the bowels were once more emptied by injection; and sponging briskly all over with warm spirits and water was advised and practised. The father continued the use of the hyoscyamus mixture, avowing that it calmed his restlessness.

21*st*. No more of the convulsions. Pulse still irregular. He certainly looked decidedly better, turning his eyes towards us with a conscious and attentive expression. The right arm and leg, however, were *paralyzed*, and his apparent efforts to speak proved abortive. The blister raised well.

22*d*. All the symptoms have improved, except the paralysis. Repeated stimulating frictions were used to the affected limbs.

23*d*. The right leg already begins to show some return of con-

trol. Speech is yet very slowly and imperfectly accomplished, but his senses appear to be acute, and consciousness perfect. He receives nourishment with avidity, and sleeps well. He continued to improve from that date, and, by the 30th of October, had entirely regained the use of both the limbs which were paralyzed, being, in all respects, so far as I could discover, well.

I had, during its progress, supposed this to be a case of tubercular meningitis, from the slowness of its approach and advance, with but moderate circulatory excitement, and most obstinate cerebral symptoms. Apart, also, from the difficulty of diagnosis between this form of the disease and simple meningitis, I had founded an unfavorable prognosis upon the same facts, with the knowledge of the child's inherited predisposition. The symptoms which especially pointed to this expectation were, the great *frequency of the convulsions* (according to the child's father, at least every twenty minutes during the night of the 17th, the day and night of the 18th, and the day-time of the 19th—two days and two nights); the occurrence of these convulsions, also, at a *late period of the disease*—between the eighth and the sixteenth day; the *irregular pulse*, observed steadily during four or five days; the total absence, through most of the same period, of sensation or any evidence of consciousness; the involuntary discharges; and, lastly, the *hemiplegia*.

Rilliet and Barthez assert that when, with symptoms of meningitis, general convulsions occur frequently or with violence, they almost always coincide with tubercles of the substance of the brain. "Perfect paralysis," says Dr. Gerhard (*Amer. Journ. of Med. Sci.*, May, 1834, p. 107), "did not occur, unless immediately before death." And Dr. Meigs terminates his list of the signs which most positively indicate the near approach of death in meningitis with the phrase, "particularly general convulsions."

The same writer (Dr. J. F. Meigs) alludes, without details, in his work on the *Diseases of Children*, to a case which I suppose to have been somewhat similar; and, while treating of Sir Benjamin Brodie's plan of mercurial inunction, he refers to a parallel instance, occurring under that treatment, recorded by the editor of *Braithwaite's Retrospect* (vol. iv. 1846).

But I do not, in any of the works I have had opportunity to consult, find such definite statements, particularly with regard to

the possible time of duration of convulsive symptoms, in cases which recover, as enable me to judge, authoritatively, of the degree of rarity of such an occurrence as has just been narrated. Charpentier asserts that, in the *first* period of tubercular meningitis, a cure is possible. In the second stage, when no doubt can exist as to its nature, Guersent believes that he has seen one recovery in a hundred cases. Of those which arrive at the third period, he has seen none recover, *even temporarily.*

It is, then, my duty to record that the above-mentioned child, H. S., continued in good health, with excellent appetite, digestion, and spirits, and increasing in flesh, until November 26th, about a month after the date of his previous recovery. He was at that time, while returning in an omnibus from Frankford, attacked with a convulsion, which did not leave him entirely until the middle of the next day, the 27th, when he died.

Must not this, however, be considered a *new* and separate attack from the one above described?

On referring to Guersent's elaborate article on "Méningite Tuberculeuse," in the *Dictionnaire de Médecine* (1839), I find a record by him of two cases somewhat similar in their mode of termination.

The one, he says, having been treated in the Hôpital des Enfans, "en était sorti dans un état de demi-convalescence, lorsqu'au bout de cinq semaines il fut repris de nouveau de tous les symptômes de la maladie aiguë, a laquelle il succomba: les caractères anatomiques de la méningite tuberculeuse furent parfaitement constatés par la nécropsie." The other case resembled this, except that the period of apparent convalescence lasted two months, with a good appetite, and "ayant repris l'embonpoint;" after which he was reattacked, and died.

May we not imagine, however, that, if such a convalescence could last two months, it might, in a case affected with nearly similar lesions, be prolonged indefinitely?

The interest of such facts consists chiefly in the evidence given by them of the uncertainty which attends our knowledge, by symptoms, of the true characters, and especially the prognosis, of cerebral disease. They may properly have the effect of favoring great cautiousness of anticipation, and perseverance in the use of remedies, even under the most unfavorable circumstances.

On the 13th of January, 1855, the little sister of the patient whose history has been given—and the last of that family—became my patient. Her age was about seven. Her appearance was more robust than that of her brother had been. For two weeks, she had been moping, complaining of her head, &c. She vomited the day before I saw her, and suffered much with the paroxysmal pains in the head—screaming at times violently. Her symptoms were, in short, evidently those of her family complaint. After two days' treatment by free purgation, venesection to ʒvi, and small doses of calomel and tartar emetic, besides a blister to the neck—which, however, failed to vesicate—I obtained the advice of Dr. W. Pepper, in consultation. Unfortunately for the just appreciation of the treatment instigated at his request, the child died before it could be properly put into operation, not many hours after our visit. Her pulse had, during the previous day, fallen from 120 to 84; a symptom probably of serous effusion.

An autopsy of the brain of this patient—performed by Dr. R. P. Thomas—gave the following appearances:—

Brain, large and firm. Longitudinal sinus of the dura mater filled with air, which fluctuated under the finger before it was opened; it was quite empty of blood. The veins generally were *slightly* enlarged, especially at the base of the brain, and more than usually adherent to the surrounding parts; but no minute vascularity or turgescence appeared in the substance of the brain. Pia mater of the convexity, natural. Arachnoid membrane generally thickened a little, but considerably so at the base; with *very firm and deep adhesions between the hemispheres.* In the ventricles, ʒiv of serum were found. At the point of junction of the medulla oblongata with the pons varolii, on each side, a cluster of *semi-transparent* granulations existed, of one-fourth the size of a pea, such as Robin* describes as "*plâques* of amorphous matter, sprinkled with fatty granulations, more transparent than the true tubercle of the meninges," which he asserts, as does also Lebert,† to be invariably yellow. Judged by this description—or by comparison with the tuberculous masses conspicuous in the lungs,

* Bernard and Robin on the Blood, Note C., p. 206.

† Physiol. Pathol., tom. i. p. 353.

liver, &c., in familiar cases—no tubercle existed in the brain or membranes of this subject.

In connection with the history of these cases, I may remark upon the observation which I was allowed to make of the brain of a patient who died about the same time, under the care of Dr. J. V. Emlen, whose history, with theirs, would seem to justify the occasional employment of the terms "scrofulous meningitis," or "Whytt's disease," or "acute hydrocephalus," rather than tubercular meningitis.

This patient, a boy of eleven years of age, had been long a sufferer with scrofulous inflammation of the knee, resulting in anchylosis; a preparation of the joint being now in the possession of Dr. Thomas. The knee, however, had been free from disease for two years before the cerebral attack commenced, which was about three weeks before his death. The symptoms were essentially such as are described as indicating the presence of tubercular meningitis.

We observed, upon inspection, but one aggregated deposit which could be compared to the tubercles of other regions; this was upon the base of the cerebellum; and, according to the test of Robin, it must not be considered tuberculous. No evidence whatever of disease was visible upon the convexity, or in the substance of the cerebrum; while the whole of its base was covered with a pearl-colored plastic deposit—the arachnoid being thickened and agglutinated between the hemispheres—and about ʒiij of serum existing in the ventricles.

In apposition with these appearances, I may quote M. Rilliet's remarks,* as referred to in a recent paper in the *Brit. and For. Medico-Chirurg. Review* (Oct. 1854), to the effect that "agglutination of the fissure of Sylvius, with pseudo-membranous or concrete purulent infiltration at the *base* of the brain, while the arachnoid and pia mater of the *convexity* are uninflamed, indicate with certainty the scrofulous variety of meningitis."

Dr. W. Hughes Willshire almost exactly describes the condition of things exemplified in Dr. Emlen's patient, by saying (*Med. Times*, July 3, 1847), that "a limited number of cases of scrofulous meningitis occur, in which exist evidences of inflammation

* Traité Clinique et Pratique, &c., vol. xii. p. 396.

at the base, and sometimes at the convex surfaces of the brain, in which the effusion is always concrete, but yet no distinctly tuberculous matter or granulations are to be detected."

Lastly, M. E. Bouchut (*Maladies des Nouveaux-nés*, Paris, 1852), speaks only of the *simple* and *granular* meningitis; the latter being the variety which affects tuberculous children; and M. Henri Hahn, in his *Clinical Monograph* upon the disease under discussion, published in 1858, observes distinctly, that "although in children dying from tuberculous meningitis, cerebral or meningeal tubercles are pretty frequently observed, yet they are *not always* so."

I find, upon reference to Dr. Gerhard's reports in the *American Journal of Medical Sciences*, 1834 and 1835, that, in a majority of his cases, the characteristic appearances were described as "gray, transparent, or semitransparent granulations." I merely mention this fact, without attempting to decide as to the comparative correctness of the then accepted view of the tubercular character of these deposits, or of the contrary one of Robin, above alluded to; suggesting, only, with great diffidence, the inquiry whether, even under the microscope, the peculiar conditions of extravasation upon a serous membrane may not render it difficult to distinguish between such formations and the *inflammation corpuscles* of Gluge, or *pyoid globules* of Lebert. (*Pathol. Histol.* of Gluge, trans. by Leidy, pp. 40 and 45.)

I have nothing further to add, except that I incline to the view of Prof. Simon,* and M. Mandl,† and others, that there is no characteristic tubercular cell or corpuscle; its true elements being amorphous; and that as, so far as I know, the only conceivable modes in which tuberculous deposit can essentially affect the condition of an organ are: 1, by replacing the normal tissue to an extent sufficient to impair its function; or 2, by accumulation in the hard or softened state, producing mechanical irritation and obstruction—hence the fact of numerous cases, with all the symptoms and history of tubercular meningitis, so called, being found to present no tubercles, proves that the pathology of the affection does not depend upon their deposit. This is virtually acknowledged by Dr. Gerhard in his excellent papers, already quoted.

* Pathology, p. 134.

† Archiv. Gén. de Méd., April, 1854.

We must, therefore, look farther for its determination, into that state of the blood, or functional conditions, which may or may not, under different circumstances, result in such a deposit or degeneration; studying, in fact, in this connection, the important but most difficult subject of the relations which exist between tuberculosis and inflammation.

And, while some obscurity thus rests upon the question of pathology, and much upon the diagnosis, it would seem, upon the whole, most rational, in my view, to treat acute affections of the brain, attended with inflammatory symptoms, as we would other acute inflammations, namely: by moderate depletion in the earliest stage, followed by *blisters*, and mercurial inunction; reserving proper antiscrofulous and recuperative means for the chronic stage, if such should arrive; or, preferably, always, of course, *anticipating* the establishment of the diathesis by their prophylactic use.

Dr. WISTER announced, on behalf of Dr. RUSCHENBERGER, that the annual Report on Meteorology and Epidemics would probably be ready for presentation in the month of March.

PERITONITIS IN TYPHOID FEVER, WITHOUT INTESTINAL PERFORATION.

Dr. WOOD made the following remarks on this subject:—

"Since my last communication to the College, a case has occurred to me at the Pennsylvania Hospital, which has some bearing on the question referred to in that communication; whether, namely, recovery has ever really taken place from peritonitis resulting from intestinal perforation in typhoid fever. What I stated at a former meeting of the College proves, I think, the possibility of such an event. The case of which I am about to give an outline shows, like those reported as having occurred in one of the hospitals of Paris, that we can never be positively certain, in any particular instance of peritonitis in the advanced stage of typhoid fever, that it originated in perforation.

"J—— B——, aged seventeen years, entered the hospital on the 2d of January. According to his own account, he had been three days ill; but the symptoms, which were those of typhoid

fever in the middle of its course, evinced that he was in the second week of the disease. The tongue was quite dry, and the abdomen tympanitic; and the characteristic red spots, if not present at the time of his entrance, made their appearance very soon afterwards. Under the plan of treatment usually pursued in the hospital, including the use of oil of turpentine as an alterative to the ulcerated surfaces in the intestinal mucous membrane, he gradually amended; and, on the 20th, I presented him to the class in attendance upon the clinical lectures as quite convalescent. On the 21st, however, he was suddenly seized with severe abdominal pains, tenderness on pressure, and great prostration; and it was evident that he was laboring under an attack of violent peritonitis. I had no doubt of the existence of perforation of the bowel, which I felt disposed to ascribe to an orange which he had surreptitiously eaten a few days previously, and of which, in order to conceal his violation of the rules of the ward, he had probably swallowed the seeds and rind. With this conviction of the nature of the case, I directed the use of sulphate of morphia largely, according to the well-known plan of Drs. Graves and Stokes, with perfect rest, a blister over the abdomen, and, towards the close of the case, stimulants in order to support life. The system never fully reacted, and death took place on the 25th.

"Dr. Forbes, one of the resident physicians of the hospital, opened the body, and found a small quantity of turbid liquid in the abdominal cavity, with evidences of almost universal inflammation of the peritoneum; but, on the closest and most careful inspection, could discover no perforation of the bowel; nor was there the slightest fecal odor in the liquid effused. I had afterwards an opportunity of examining the whole of the intestines, though not *in situ*. The internal surface of the ileum presented several recent and well-defined *cicatrices*, finely marking the boundary of the patches of Peyer's glands, which I exhibited to the class as the finest example I had seen of this appearance; but there was not a single remaining ulcer visible, and I could find no sign of an opening. The peritoneal coating was covered with a very thin, glutinous, and translucent exudation of coagulable lymph, but with little redness. At no one point upon the surface were there more decided marks of inflammation than elsewhere, to indicate the possible seat of an opening. I was compelled, there-

fore, to regard the case as one of peritonitis without perforation. No discoverable cause of the affection existed; and I am inclined to rank this with those not very uncommon cases, in which peritonitis comes on without any special known cause, at the close of long-continued and exhausting affections, perhaps in consequence of depravation of the blood.

"This case is calculated to throw great doubt upon the existence of intestinal perforation in those instances of peritonitis, occurring in the advanced stage of typhoid fever, in which cures have been effected, of which I have been so fortunate as to witness two, in my own experience. They may have been, as in the case just related, nothing more than simple peritonitis without any opening whatever through the coats of the bowel. One important practical inference, however, may be deduced from them, viz: that the opiate treatment is the one best adapted to peritonitis occurring under these circumstances, whether with or without perforation; as several instances of recovery have taken place under that treatment, while I am not aware that one is on record effected under any other plan."

A proposition (60) for Fellowship was presented.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM MARCH 7, 1855, TO APRIL 4, 1855, INCLUSIVE.

Stated Meeting, March 7, 1855.

Dr. WOOD, President, in the chair.

Present, twenty-nine Fellows.

Dr. F. G. SMITH, chairman of the Committee of Publication, announced the issue of No. 7, Vol. II., N. S. of the *Transactions*.

The Secretary presented, on behalf of Dr. RUSCHENBERGER, his

REPORT ON METEOROLOGY AND EPIDEMICS FOR THE YEAR 1854.

During the year 1854, the thermometer fluctuated between 6° and 98° F.; the range being 92°. The mean temperature of the year was 54.75°, which is 2.71 above the average mean of sixty years.

The quantity of rain and snow which fell during the year was 40.180 inches, which is 3.58 inches less than the average of twenty-five years.

The following table exhibits the mean temperature of the months, the range of the thermometer, and the hygrometric con-

dition of the atmosphere. It is derived from observations made and recorded by Dr. John Conrad, at the Pennsylvania Hospital.

Meteorological Summary for the year 1854.

	TEMPERATURE.						HYGROMETRIC OBSERVATIONS.			
	9 o'clock A. M.		Mean of the month.	Range of ther.		Average for 40 years.	Dew-point at 9 A. M.	Degree of dryness at 9 A. M.	Inches of rain.	Average of 25 years.
	Max.	Min.		Max.	Min.					
January	58	17	32.35	59	12	30.46	31.51	10.29	2.331	3.28
February	48	19	34.54	63.5	16	29.18	21.70	9.98	4.203	2.83
March	60	27	43.00	78	21	38.24	26.20	15.35	1.618	3.72
April	70	34	51.25	84	28	51.42	39.36	11.32	7.750	3.26
May	73	43	64.89	83	36	62.94	52.38	12.07	6.935	3.53
June	87	61	71.86	96	51	73.12	60.05	11.85	2.390	3.91
July	88	67	78.83	98	64	75.58	68	10.80	3.024	4.29
August	89	67	75.77	96	57	72.10	62*	13.83	0.842	4.34
September	84	52	69.50	92.5	47	65.47	58.86	10.12	3.798	3.30
October	72	41	58.77	80	34	53.99	47.50	10.85	1.545	3.30
November	64	29	45.40	70	26	42.67	34.06	10.81	2.834	3.53
December	42	8	31.08	49.5	6	31.56	21.30	9.70	2.910	3.93
For the year			54.75			52.04			40.180	43 76

The total number of deaths in the city of Philadelphia, according to the reports of the Board of Health, for the year 1854, is 11,815, which is 2,104 more than the aggregate mortality for the preceding year. Deducting the number of still-born (534), the total mortality is 11,281, or 2,141 greater than that of 1853.

Including the still-born, 3,324 died within the first year, 1,387 between one and two years, and 1,155 between two and five years. Excluding the still-born, 5,332, or 47.26 per cent. of the mortality was of children under five years of age.

Exclusive of still-born, 6,284 died under twenty years, and above that age, or adults, 4,997. Of the latter, 416 had passed the 70th, 196 the 80th, 63 the 90th, and 8 the 100th year of existence.

In estimating the health of the city from the appended quarterly tables of mortality, it is proper to exclude those reported under the following heads:—

* The dew-point was determined by observation on nineteen days of this month, and for the remaining days it was estimated.

Casualties	123	
Burns and scalds	51	
Concussion of the brain	12	
Drowned	115	
Injury	2	
Poisoning	11	
Suicide	14	
Violence	2	
	—	330
Debility		465
Fractures		16
Old age		191
Still-born		534
Unknown		319
Wounds		1
		1,856

Deducting this aggregate of from the total mortality (11,815), the number of deaths from various diseases is found to be 9,959, or 1,863 more than the number reported for the year 1853.

The number of deaths from diseases of the lungs and air-passages, excluding hooping-cough, is 2,616, or 23.18 per cent. of the total mortality. From "consumption of the lungs" alone, the number of deaths is 1,378, or 12.21 per cent. of the total mortality, exclusive of still-born, which is 1.53 per cent. less than for the year 1853, but still 3.26 per cent. above the mortality of this disease in the year 1851.

The mortality from diseases of the lungs and air passages for five years is exhibited in the following table. The number of deaths from hooping-cough has increased rapidly since the year 1852.

Mortality from Diseases of the Lungs and Air-passages.

	ANNUAL AGGREGATES.					QUARTERS OF 1854.			
	1850.	1851.	1852.	1853.	1854.	1st.	2d.	3d.	4th.
Abscess, pulmonary	12	15	16	9	9	6	2	1	...
Angina pectoris	...	...	8	11	4	1	...	3	...
Asphyxia	17	20	28	38	22	10	9	...	3
Asthma	18	11	14	14	29	8	6	8	7
Congestion of the lungs	58	68	62	46	64	24	14	13	13
Consumption, laryngeal	...	9	8	1	...	...	...	...	...
Consumption of the lungs	907	881	1182	1246	1378	385	320	324	349
Croup	143	180	187	295	259	88	70	28	73
Disease of the chest	...	2	10	7	9	3	4	1	1
Disease of the lungs	32	28	21	34	42	10	9	15	8
Dropsy of the chest	63	62	46	46	32	9	10	8	5
Effusion on the chest	...	6	10	9	6	5	1	...	...
Effusion on the lungs	4	1	4	3	4	1	3	...	...
Emphysema	...	3	...	1	2	1	1	...	...
Empyema	2	2	1	1	1	...	1	...	...
Gangrene of the lungs	...	6	2	1	3	...	1	1	1
Hepatization of the lungs	...	1	1	...	...	...	...	...	...
Hemorrhage from the lungs	24	29	22	23	26	9	7	3	7
Influenza	...	6	8	2	3	...	3	...	...
Inflammation of the bronchi	191	175	207	195	244	96	72	24	52
" " chest	...	...	14	12	7	2	3	...	2
" " larynx	23	25	21	19	16	8	...	5	3
" " lungs	352	352	438	346	435	162	118	64	91
" " pleura	11	9	11	15	21	8	7	2	4
" " trachea	...	1	...	...	...	...	...	...	...
Totals	1850	1892	2816	2874	2616	836	661	500	619
Hooping-cough	117	122	16	64	155	81	45	51	28
Totals	1967	2014	2832	2488	2771				
Total mortality, exclusive of still-born	8025	8401	9655	9140	11281				
Per cent. from diseases of the lungs	23.05	22.50	23.98	25.97	23.18				
Per cent. from consumption of lungs	11.30	10.48	12.13	13.74	12.21				

The number of deaths from diseases of the nervous system for the year 1854 was 2,142, or 17.21 per cent. of the total mortality.

The mortality from nervous affections is stated in the following table, for 1850, 1851, 1852, 1853, and 1854, and for the quarters of the latter year.

Mortality from Diseases of the Nervous System.

	ANNUAL AGGREGATES.					QUARTERS OF 1854.			
	1850.	1851.	1852.	1853.	1854.	1st.	2d.	3d.	4th.
Abscess of the brain	...	5	3	4	4	...	3	...	1
Apoplexy	97	85	91	112	111	22	18	39	32
Atrophy of the brain	...	...	2	...	...	...	...	...	...
Chorea	...	3	2	...	2	...	2	...	...
Catalepsy	...	...	1	...	...	...	...	...	...
Compression of the brain	5	6	1	7	1	1	...	...	...
Congestion of the brain	97	130	124	153	207	45	35	95	32
Consumption of the brain	...	2	1	...	...	...	...	...	...
Convulsions	444	479	483	530	727	178	191	229	129
Disease of the brain	88	74	99	75	87	26	20	29	12
Dropsy of the brain	283	245	236	190	298	75	77	98	48
Effusion on the brain	74	78	93	84	93	24	20	39	10
Epilepsy	14	28	23	19	17	6	4	6	1
Inflammation of the brain	218	302	254	156	361	90	96	125	50
Insanity	...	4	1	...	2	...	...	2	...
Irritation of brain or spinal marrow	...	1	...	2	2	...	1	1	...
Mania	4	7	11	6	14	1	3	6	4
Mania à potu	54	64	52	66	56	7	11	19	19
Neuralgia	5	3	2	5	3	...	...	1	2
Palsy	71	50	77	65	92	20	23	32	17
Softening of the brain	10	28	16	14	19	6	3	6	4
Spinal meningitis	...	...	2	...	1	...	...	1	...
Spinal ramollissement	...	1	...	...	...	...	...	...	...
Teething	28	16	12	19	30	4	4	18	4
Tetanus	11	15	7	10	15	4	3	3	5
Trismus	...	5	4	6	5	...	2	2	1
Totals	1499	1531	1596	1483	2142	509	516	751	366
Puerperal convulsions	...	9	16	9	13				
" mania	...	1	6	5	14				
Totals	1499	1541	1618	1497	2169				
Total mortality, exclusive of still-born	8025	8401	9655	9140	11281				
Per cent. of total mortality	18.69	18.34	16.53	15.72	17.21				

The number of deaths from diseases of some of the organs of nutrition was 3,277, or 28.96 per cent. of the total mortality.

The number of deaths from dysentery alone was 442, or 3.91 per cent. of the total mortality.

From cholera asphyxia, the number of deaths was 591, or 5.23 per cent. of the total mortality.

The number of deaths from cholera infantum was 733, or 6.49 per cent. of the total mortality. This disease has rarely caused death in so large a ratio as during the past year in Philadelphia. In the year 1850, it reached 6.29 per cent. of the total mortality.

The mortality from disease of the organs of nutrition is stated in the following table for the past five years.

Mortality from Diseases of some Organs of Nutrition.

	ANNUAL AGGREGATES.					QUARTERS OF 1854.			
	1850.	1851.	1852.	1853.	1854.	1st.	2d.	3d.	4th.
Abscess	14	20	8	20	20	6	1	4	9
" abdominal	...	1	1	1	1	1	...	...	...
" of the liver	8	8	7	8	9	1	3	3	2
Cancer of the pylorus	1	1	2	...	1	...	...	...	1
" stomach and bowels	24	18	14	15	22	10	4	4	4
Cholera	6	...	...	2	591	...	21	515	55
" infantum	505	397	330	395	733	1	81	621	30
" morbus	24	28	45	19	127	1	11	96	19
Cirrhosis	...	8	7	7	11	3	4	1	2
Colic	5	7	9	5	8	...	...	3	...
Colica pictonum	2	2	...	...	1	1	...	...	...
Constipation	...	1	1	...	2	...	...	...	2
Consumption of the bowels	...	1	4	13	6	2	2	1	1
Diarrhœa	208	157	154	130	214	11	31	147	25
Disease of the liver	26	18	21	18	26	10	...	6	10
" stomach and bowels	29	19	27	20	14	2	4	4	4
Dropsy	116	123	123	148	115	31	24	29	31
" abdominal	28	29	41	22	59	15	12	15	17
Dysentery	421	401	537	374	442	22	41	320	59
Dyspepsia	2	2	3	2	5	...	2	2	1
Gout	2	5	3	3	2	1	...	...	1
Icterus	17	17	15	24	29	8	4	9	8
Ileus	8	3	1	3	2	1	1	...	...
Inflammation of the liver	37	34	39	28	32	10	10	5	7
" peritoneum	62	60	70	62	52	16	11	14	11
" stomach and bowels	187	187	233	260	173	44	32	57	40
Intussusception	...	...	7	3	3	...	1	2	...
Marasmus	217	255	246	373	447	72	85	218	72
Obstruction of the bowels	8	8	8	9	10	1	1	5	3
Scrofula	57	48	68	56	46	22	7	10	7
Tabes mesenterica	25	45	45	37	35	8	2	19	6
Tuberculosis	16	18	33	18	24	1	10	7	6
Ulceration of stomach and bowels	19	16	21	16	20	4	6	5	5
Totals	2064	1917	2028	2086	3277	305	411	2122	489
Total mor'lity, exclusive of still-born	8025	8401	9655	9140	11281				
Per cent. of total mortality	23.00	21.84	20.95	22.82	28.96				

The number of deaths from diseases of the urino-genital organs in the year 1854, was 141, as stated in the following table. Of these, 25 perished from puerperal fever, 16 from uterine hemorrhage, and 15 in childbed. Nearly one-half of the deaths from these three assigned causes, occurred in the first quarter, or cold season of the year.

Mortality from Diseases of the Urino-Genital Organs.

	ANNUAL AGGREGATES.					QUARTERS OF 1854.			
	1850.	1851.	1852.	1853.	1854.	1st.	2d.	3d.	4th.
Abortion	...	1	1	...	...	...	...	...	...
Albuminuria	...	...	...	2	6	2	1	3	...
Amenorrhœa	...	...	...	1	...	...	...	...	...
Cancer of mammæ	7	11	11	26	8	4	1	1	2
" uterus	18	17	11	11	15	7	3	1	4
Childbed	4	7	1	15	8	1	3	2	2
Chlorosis	...	...	2	2	...	...	...	...	...
Convulsions, puerperal	8	9	16	9	18	4	3	2	4
Disease of the bladder	...	1	1	3	...	...	...	...	...
" kidneys	9	8	9	8	12	3	6	2	1
" ovaries	1	1	...	...	3	1	1	1	...
" prostate gland	...	1	1	...	...	...	...	...	...
" urinary organs	1	1	2	2	...	...	...	...	...
" uterus	...	1	2	4	4	...	3	1	...
Dropsy, ovarian	3	2	3	1	1	1	...	...	...
" of uterus	...	...	...	1	...	...	...	...	...
Enlargement of prostate	...	1	1	2	...	...	...	...	...
Fever, puerperal	30	41	43	26	25	10	8	6	1
Hemorrhage from uterus	11	12	10	13	16	7	2	6	1
Inflammation of the bladder	2	10	9	9	6	3	1	1	1
" " kidneys	6	4	9	6	4	3	...	...	1
" " prostate	...	2	...	...	...	...	...	...	...
" " uterus	8	16	19	9	8	3	2	2	1
Mania, puerperal	...	1	6	5	2	...	1	1	...
Menorrhagia	...	...	1	...	1	...	...	1	...
Orchitis	...	...	1	...	...	...	...	...	...
Rupture of the bladder	...	1	...	...	...	...	...	...	...
" urethra	...	...	...	1	...	...	...	...	...
" uterus	2	...	1	4	1	...	...	...	1
Stone	...	...	2	1	1	1	...	...	...
Stricture of the urethra	...	1	...	3	...	...	...	...	...
Strangury	...	...	2	...	...	...	...	...	...
Syphilis	...	5	6	7	4	...	...	2	2
Tumor, ovarian	...	1	4	...	2	1	...	1	...
Ulceration of the bladder	...	2	...	...	...	...	...	...	...
" urethra	...	...	1	...	...	...	...	...	...
" uterus	...	1	1	...	1	...	...	...	1
Totals	110	158	176	171	141	51	34	34	22

The mortality from fevers for the year 1854 was at a less ratio than in any one of the four preceding years, being 5.12 per cent.

The mortality from fevers is stated in the following table for the year 1854, and the four years preceding. The number of deaths from scarlatina has decreased with considerable regularity since the year 1850.

Mortality from Fevers.

	ANNUAL AGGREGATES.					QUARTERS OF 1854.			
	1850.	1851.	1852.	1853.	1854.	1st.	2d.	3d.	4th.
Fever	82	25	80	18	16	...	5	8	3
" bilious	15	2	8	47	22	2	2	14	4
" catarrhal	8	...	1	...	...	...	...	...	...
" cerebral	...	2	4	1	1	...	...	1	...
" congestive	17	10	15	9	9	...	2	6	1
" continued	3	2	...	3	3	1	1	1	...
" gastric	...	1	2	1	...	...	...	...	...
" hectic	5	4	6	8	5	...	3	1	1
" intermittent	15	7	5	12	8	1	...	4	3
" inflammatory	...	...	1	...	...	...	...	...	...
" malignant	...	...	...	52	3	...	...	2	1
" nervous	1	...	2	2	5	2	1	2	...
" perniciqus	...	...	...	2	...	...	...	...	...
" puerperal	30	41	43	26	25	10	8	6	1
" remittent	35	37	36	45	45	8	13	13	16
" scarlet	439	400	419	384	161	107	40	9	5
" synocha	...	...	3	...	...	...	...	...	...
" typhoid	105	127	131	198	182	35	40	49	58
" typhus	69	38	154	155	81	17	23	24	17
" " abdominalis	...	...	...	2	...	...	...	...	...
" " icterodes	...	...	...	14	...	...	...	...	...
" yellow	...	...	...	26	12	...	...	12	...
Totals	769	746	861	1005	578	178	188	152	110
Total mortality, exclusive of still-born	8025	8401	9655	9140	11281				
Per cent. of total mortality	9.50	8.87	8.71	10.99	5.12				

The number of deaths from smallpox and from measles is stated in the following table.

	ANNUAL AGGREGATES.					QUARTERS OF 1854.			
	1850.	1851.	1852.	1853.	1854.	1st.	2d.	3d.	4th.
Measles	69	16	90	12	57	21	26	7	3
Smallpox	40	216	426	57	40	8	16	4	12
Varioloid	1	8	11	...	1	1	...	...	...
Totals	110	240	527	69	98	30	42	11	15

The most fatal diseases of the past five years are named in the following table.

Causes assigned for Death where the number is 90 and upwards.

	ANNUAL AGGREGATES.					QUARTERS OF 1854.			
	1850.	1851.	1852.	1853.	1854.	1st.	2d.	3d.	4th.
Apoplexy	97	...	91	112	111	22	18	39	32
Cholera	...	...	...	...	591	...	21	515	55
" infantum	505	397	330	395	733	1	81	621	30
" morbus	...	...	...	...	127	1	11	96	19
Consumption of the lungs	907	881	1182	1246	1378	385	320	324	349
Congestion of the brain	97	130	124	153	207	45	35	95	32
Convulsions	444	479	483	530	727	178	191	229	129
Croup	148	180	187	295	259	88	70	28	73
Debility	201	260	341	387	465	97	95	180	93
Diarrhœa	208	157	154	130	214	11	31	147	25
Disease of the brain	...	...	99	...	...	...	...	...	...
" heart	101	98	124	110	141	42	38	26	35
Dropsy	116	128	128	148	115	31	24	29	31
" of the brain	283	245	236	190	293	75	77	93	48
Dysentery	421	401	587	374	442	22	41	320	59
Effusion on the brain	...	...	93	...	93	24	20	39	10
Erysipelas	...	...	91	...	...	...	...	...	...
Fever, scarlet	489	400	419	384	161	107	40	9	5
" typhoid	105	127	131	198	182	35	40	49	58
" typhus	...	...	154	155	...	...	...	...	...
Inanition	...	106	91	...	...	...	...	...	...
Inflammation of the brain	218	262	254	156	361	90	96	125	50
" bronchi	191	175	207	195	244	96	72	24	52
" lungs	852	852	488	346	485	162	118	64	91
" stomach and bowels	187	187	233	260	173	44	32	57	40
Marasmus	217	255	346	373	447	72	85	218	72
Measles	...	...	90	...	...	...	...	...	...
Old age	185	186	189	185	191	46	44	61	40
Smallpox	...	216	426	...	...	...	...	...	...
Still-born	453	470	500	571	534	147	127	132	128
Unknown	147	141	270	218	319	63	65	125	66

TABLE OF MORTALITY

Collated from Returns to the Board of

FIRST QUARTER. Commencing

	Jan. 7.		Jan. 14.		Jan. 21.		Jan. 28.		Feb. 4.		Feb. 11.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Abscess	...	...	...	...	1	...	...	1	...	...	...	...
" abdominal	...	...	...	...	...	...	...	...	...	...	...	...
" of brain	...	...	...	...	...	...	...	...	...	...	...	...
" liver	...	...	...	...	1	...	...	...	...	...	...	...
" lungs	1	...	...	...	...	...	...	1	...	...	...	...
Albuminuria	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia	1	...	...	...	...	...	...	...	...	...	...	...
Angina pectoris	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	4	...	2	...	...	...	1	...	1	...	1	...
Asphyxia	...	...	...	2	...	...	...	...	...	2	...	...
Asthma	...	...	...	...	...	...	1	...	8	...	...	...
Cachexia	...	...	...	...	...	...	...	...	...	...	...	...
Cancer and scirrhus	1	...	1	...	...	...	1	...	...	...	...	...
" of the breast	1	...	...	...	...	...	...	...	1	...	...	...
" " stomach and bowels	1	...	...	...	1	...	...	...	2	...	...	...
" " liver	...	...	...	...	...	...	...	...	...	...	...	...
" " tongue	...	...	...	...	...	...	...	...	...	...	1	...
" " uterus	...	...	...	...	1	...	2	...	1	...	...	...
Cancrum oris	...	...	...	...	...	...	...	...	...	...	...	...
Casualties	...	1	...	1	2	...	1	...	4	...	8	...
Burns and scalds	...	1	...	...	...	2	...	2	...	1	...	8
Concussion of the brain	...	...	...	...	...	...	...	...	...	...	...	1
Drowned	...	...	1	...	1	...	...	...	...	...	...	...
Injury of the spine	...	...	...	...	...	...	...	...	...	...	...	...
Poisoning	...	...	...	...	...	...	...	...	...	...	...	...
Suicide	1	...	...	...	...	...	...	...	...	...	1	1
Childbed	...	...	...	...	...	...	...	...	...	...	...	...
Cholera infantum	...	...	...	1	...	...	...	...	...	...	...	...
" morbus	1	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis	...	...	...	...	...	...	...	...	...	...	1	...
Colica pictonum	...	...	...	...	1	...	...	...	...	...	...	...
Compression of the brain	...	...	...	...	...	...	...	...	...	1	...	...
Congestion of the brain	...	1	1	2	...	4	...	2	1	...	...	5
" " liver	...	...	...	...	...	...	...	...	...	...	...	...
" " lungs	...	2	...	1	2	2	1	2	...	1	...	1
Consumption of the bowels	...	...	...	...	...	...	...	...	...	...	...	...
" " lungs	35	8	28	2	30	4	21	8	18	4	29	5
Convulsions	1	11	...	14	...	6	...	15	2	17	2	14
" puerperal	1	...	...	...	...	...	1	...	...	...	...	...
Coryza	...	...	...	...	...	...	...	...	...	...	...	...
Croup	...	6	...	9	...	6	...	16	...	...	...	5
Cyanosis	...	...	...	...	...	2	...	1	1	...	...	...
Debility	8	8	4	7	...	5	8	7	2	7	8	2
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	...	...	...	...	...	1	1	...	8	1	1	1
Disease of the brain	1	8	...	1	...	...	...	...	1	8	...	1
" chest	...	...	...	1	...	...	...	...	...	1	...	...
" heart	1	2	1	4	4	1	...	1	5	2	2	...
" kidneys	...	...	...	...	...	...	...	...	...	1	...	...
" liver	2	...	...	...	...	...	...	...	...	...	1	...

FOR THE YEAR 1854.

Health. By W. S. W. RUSCHENBERGER, M. D.
December 31, 1853.

Feb. 18.		Feb. 25.		Mar. 4.		Mar. 11.		Mar. 18.		Mar. 25.		April 1.		Total first quarter 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors	Adults.	Minors.	Adults.	Minors.	Total.
1	1	...	...	...	...	...	...	...	...	1	...	1	...	4	2	6
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
1	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	3
...	...	...	...	1	1	...	...	1	...	...	1	...	...	3	3	6
...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	2
...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
1	...	1	...	...	...	4	...	3	...	1	...	4	...	22	...	22
...	1	...	...	...	2	...	1	...	...	...	1	...	1	...	10	10
...	...	...	...	1	...	...	...	2	...	...	1	...	...	7	1	8
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	1	...	...	...	...	...	1	...	...	...	...	...	5	...	5
1	...	...	...	...	...	...	...	...	...	...	...	1	...	4	...	4
...	...	...	...	...	...	3	...	...	...	2	...	1	...	10	...	10
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	1	...	1	...	7	...	7
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
1	1	1	2	2	...	4	...	1	1	2	...	1	...	22	6	28
2	3	...	2	...	...	...	1	1	...	...	1	...	3	19	3	22
...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	2	3
1	...	1	...	1	...	...	...	1	...	1	...	...	...	7	...	7
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	3	1	4
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	...	...	...	...	1	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	6	1	7	2	...	1	1	1	2	1	1	1	4	10	35	45
...	...	1	...	...	...	...	...	...	1	...	...	...	...	1	1	2
...	1	...	2	...	...	...	2	...	1	1	2	...	3	4	20	24
1	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
23	4	29	3	30	5	22	5	25	5	24	7	23	3	332	53	385
1	12	1	15	1	11	...	15	...	13	...	13	1	13	9	169	178
...	...	...	...	1	...	...	...	1	...	...	...	...	...	4	...	4
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	3	...	7	...	5	...	2	...	4	...	10	...	15	...	88	88
...	1	...	2	...	1	...	1	...	...	...	...	...	...	1	8	9
1	4	5	2	6	8	4	7	3	2	1	6	2	5	37	60	97
...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
...	...	...	...	...	2	...	...	...	...	...	...	1	...	6	5	11
1	1	1	4	1	2	...	...	2	1	...	1	...	2	7	19	26
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
4	1	1	1	1	...	4	...	2	1	3	...	...	1	28	14	42
...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	2	3
1	...	...	1	...	...	3	1	...	...	1	...	...	...	3	2	10

TABLE OF MORTALITY.—

	Jan. 7.		Jan. 14.		Jan. 21.		Jan. 28.		Feb. 4.		Feb. 11.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Disease of the lungs	...	1	1	...	...	1	1	...	...	...	2	...
" ovaria	1	...	...	...	...	...	...	...	...	...	...	...
" parotids	...	...	...	...	...	...	...	...	...	...	...	...
" skin	...	...	...	...	...	...	...	1	...	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...
" thyroid glands	...	...	...	...	...	...	...	...	...	...	...	...
Dropsy	1	2	...	...	2	3	...	2	3	...	1	...
" abdominal	...	...	2	...	1	...	...	6	...	...	1	...
" of the brain	...	6	...	4	...	2	3	2	...	5	1	7
" chest	1	...	1	...	...	...	...	...	...	...	...	1
" heart	...	...	...	...	...	...	1	...	1	...	...	...
" ovaria	...	...	...	...	...	...	...	...	...	...	...	...
" pleura	1	...	...	...	...	...	...	...	...	...	...	...
Dysentery	1	...	1	...	1	...	3	...	...	1	3	1
Effusion on the brain	2	1	...	3	...	...	...	3	1	1	...	...
" chest	...	...	1	...	...	1	...	...	...	...	...	...
" heart	...	...	1	...	...	...	...	...	1	...	...	...
" lungs	...	...	...	...	...	...	...	...	...	...	...	...
Emphysema	...	1	...	...	...	...	...	...	...	...	...	...
Empyema	...	...	...	...	...	...	...	...	...	...	...	...
Enlargement of the heart	1	...	...	...	1	1	1	...	...	...	1	...
Epilepsy	...	...	1	...	...	...	1	...	...	...	1	...
Erysipelas	1	1	...	...	...	...	...	1	...	1	...	2
Fever, bilious	...	...	1	...	...	...	...	...	...	...	...	...
" continued	1	...	...	...	...	...	...	...	...	...	...	...
" intermittent	...	...	...	...	...	...	...	...	...	...	...	...
" nervous	...	...	...	...	...	...	...	...	...	...	...	...
" puerperal	...	...	...	...	...	...	...	...	1	1	...	1
" remittent	...	...	...	...	...	...	...	...	1	...	...	...
" scarlet	...	9	...	8	...	8	...	4	...	8	...	10
" typhoid	2	2	5	3	1	1	...	1	1	1	2	...
" typhus	...	1	2	1	3	2	1	...	...	1	...	1
Fracture of the skull	...	...	...	...	...	...	...	...	...	...	...	...
Fungus hæmatodes	...	...	1	...	...	...	...	...	...	...	...	...
Gangrene	...	1	...	...	...	...	...	...	...	...	...	...
Gout	...	...	...	...	...	...	...	...	...	...	1	...
Hemorrhage	...	...	...	...	...	...	...	...	...	...	...	...
" from the lungs	...	...	1	...	...	...	1	...	1	...	1	...
" stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	1	...	...	...	1	...	1	...	...	...
Hernia	...	...	...	...	...	...	1	...	2	...	...	...
Hysteria	...	...	...	...	...	...	...	...	...	...	...	...
Icterus	..	...	...	...	...	...	...	1	1	1	...	...
Ileus	...	...	...	...	...	...	...	...	...	...	...	...
Inanition	1	1	...	...	...	...	...	1	...	1	...	4
Inflammation	...	...	...	...	...	...	...	...	...	...	...	...
" of the bladder	...	...	...	...	...	...	...	...	1	...	...	...
" brain	1	1	2	6	2	1	1	4	...	2	3	5
" bronchi	1	12	1	10	2	...	2	7	1	8	...	9
" chest	...	...	...	...	...	...	...	...	...	...	...	...
" fauces	...	...	...	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	...	...	1	...	...	...	...	...

FIRST QUARTER—*Continued.*

Feb. 18.		Feb. 25.		Mar. 4.		Mar. 11.		Mar. 18.		Mar. 25.		April 1.		Total first quarter 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	...	...	...	...	...	1	...	1	...	...	...	...	2	6	4	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	1	2
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
1	...	1	1	1	...	2	...	4	1	3	1	1	1	20	11	31
3	...	...	...	1	...	...	...	1	...	...	...	...	...	9	6	15
...	5	...	5	...	5	...	3	...	8	...	10	...	9	4	71	75
1	...	2	1	...	...	...	...	2	...	...	...	...	...	7	2	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	8	...	1	...	...	...	...	1	1	...	1	...	2	12	10	22
...	1	...	3	...	2	...	1	...	...	...	1	...	5	3	21	24
...	2	...	...	...	...	...	1	...	...	...	...	...	...	1	4	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	...	...	...	1	...	1	...	...	...	...	2	...	...	6	3	9
1	...	...	...	...	...	...	...	1	...	...	...	1	...	6	...	6
...	...	3	...	1	4	1	...	...	2	...	...	1	2	7	13	20
...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	1	2
1	...	1	...	1	...	2	...	1	...	...	...	1	...	8	2	10
...	...	...	...	...	...	...	2	...	...	...	...	...	...	1	2	3
1	16	...	15	...	7	...	9	...	6	...	2	...	4	1	106	107
1	1	2	2	...	...	...	2	1	1	1	2	1	2	17	18	35
1	...	1	...	...	...	...	...	2	...	1	...	...	...	11	6	17
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	...	...	1	1	...	...	1	1	3	3	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	...	...	...	1	...	...	1	...	...	1	2	3
...	...	2	...	1	...	...	...	1	...	1	...	...	...	9	...	9
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
1	...	...	...	...	...	2	...	1	...	...	...	...	...	7	...	7
...	...	...	...	...	...	...	1	1	...	...	...	...	1	4	2	6
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	1	...	...	...	...	1	...	1	1	1	...	...	...	4	4	8
...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1
1	2	...	1	...	1	...	2	...	...	...	1	1	...	3	14	17
...	...	1	...	...	...	1	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	1	...	...	...	1	...	...	...	3	...	3
1	6	1	8	...	4	...	6	3	9	2	8	3	11	19	71	90
2	6	1	4	1	3	...	4	...	6	1	6	2	7	14	82	96
...	1	...	...	...	...	...	...	...	...	1	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

TABLE OF MORTALITY.—

	Jan. 7.		Jan. 14.		Jan. 21.		Jan. 28.		Feb. 4.		Feb. 11.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Inflammation of the kidneys	1	...	...	...	...	...	...	...	...	...	...	...
" larynx	...	1	...	2	...	8	...	...	...	...	...	...
" liver	1	...	...	...	...	...	1	...	...	...	...	...
" lungs	6	8	4	9	7	8	2	9	8	6	4	7
" peritoneum	1	...	1	1	2	...	...	...	...	...	1	...
" pleura	2	...	...	...	...	...	1	...	1	...	...	...
" stomach and bowels	1	2	...	6	2	1	...	...	...	1	2	8
" throat	...	...	...	...	...	...	...	...	...	1	...	...
" uterus	...	...	...	...	...	...	...	...	1	...	1	...
Intemperance	2	...	2	...	...	...	...	...	...	...	1	...
Malformation	...	...	...	1	...	...	...	1	...	...	...	1
" of the heart	...	...	...	...	...	...	...	1	...	...	...	...
Mania	...	...	...	...	...	...	...	...	...	...	...	...
Mania à potu	...	...	...	...	...	...	...	...	2	...	...	...
Marasmus	1	8	...	4	2	4	1	4	1	7	1	6
Measles	...	1	...	2	...	...	...	1	...	2	...	1
Necrosis	...	...	...	...	...	...	...	...	...	...	...	...
Obstruction of the bowels	...	...	...	...	...	...	...	...	...	...	...	...
Old age	4	...	4	...	4	...	...	...	5	...	3	...
Ossification of the heart	...	...	...	...	...	...	...	...	...	...	...	...
Palsy	2	...	...	...	1	...	1	...	2	...	5	...
Perforation of stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...
Phlebitis	...	...	...	...	...	...	...	...	...	...	...	...
Purpura	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism	1	...	...	1	...	...	...	...	...	...	...	...
Scorbutus	...	...	...	...	...	1	...	...	...	...	...	...
Scrofula	1	4	...	...	...	...	1	...	...	2	...	...
Smallpox	...	1	...	...	...	...	...	...	...	1	...	2
Softening of the brain	...	...	...	...	...	...	...	1	...	...	...	...
Spina bifida	...	...	...	...	...	...	...	...	...	1	...	...
Still-born	...	12	...	9	...	12	...	11	...	12	...	12
Stone	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation	1	...	...	...	1	...	...	...	...	1	...	...
Tabes mesenterica	...	1	...	...	...	...	...	...	...	...	...	...
Teething	...	...	...	2	...	1	...	...	...	...	...	...
Tetanus	...	1	...	...	...	...	...	...	...	...	...	...
Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...
Tumor	...	...	...	...	...	...	...	...	...	...	...	...
" abdominal	1	...	...	...	1	...	...	...	...	...	...	...
" ovarian	...	...	...	...	1	...	...	...	...	...	...	...
Ulceration of the liver	...	...	...	...	...	...	...	...	...	...	...	...
" neck	...	1	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	1	1	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...
Unknown	3	4	4	2	5	2	2	...	1	1	5	4
Varioloid	...	...	...	...	...	...	...	...	...	...	...	...
Whooping-cough	...	1	...	1	...	...	...	2	...	2	...	1
Wounds, gunshot	...	...	...	...	...	...	...	...	...	...	...	...
From the almshouse	9		6		14		17		12		17	
From the country	1		1		1		...		1		1	
People of color	12		7		27		12		9		8	

FIRST QUARTER—*Continued.*

Feb. 18.		Feb. 25.		Mar. 4.		Mar. 11.		Mar. 18.		Mar. 25.		April 1.		Total first quarter 1855.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
1	...	...	...	1	...	...	...	...	...	...	...	...	...	8	...	8
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	8	8
1	...	1	...	2	...	2	...	1	1	...	...	...	...	9	1	10
4	12	2	9	4	9	4	11	5	9	2	5	5	8	52	110	162
...	...	2	...	...	...	3	1	1	...	...	...	2	1	13	3	16
1	...	2	...	...	...	...	...	...	...	...	...	1	...	8	...	8
...	...	2	...	1	2	2	5	5	3	1	1	2	2	18	26	44
...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	4	4
...	...	...	...	...	...	...	...	1	...	...	...	...	...	3	...	3
...	...	1	...	...	...	...	...	...	...	...	...	1	...	7	...	7
...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	5	5
...	1	...	...	...	...	...	1	...	...	...	1	...	...	...	4	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	1	...	4	...	...	...	...	...	7	...	7
2	3	1	8	...	3	...	7	1	6	...	1	...	6	10	62	72
...	6	...	2	...	2	...	1	...	1	...	...	...	2	...	21	21
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
4	...	7	...	5	...	1	...	3	...	4	...	2	...	46	...	46
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
2	...	3	...	...	...	3	...	...	...	1	...	...	...	20	...	20
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	2
...	...	2	...	...	...	...	...	...	1	...	1	1	1	4	4	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	2	1	1	1	...	2	...	...	...	4	...	2	5	17	22
...	1	...	1	...	1	...	...	1	...	...	...	...	...	1	7	8
...	1	1	...	...	...	...	...	1	...	1	...	1	...	4	2	6
...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	3	3
...	9	...	12	...	19	...	16	...	10	...	6	...	7	...	147	147
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	...	...	...	2	...	1	...	...	...	1	...	...	2	5	7
...	2	...	2	...	...	...	...	...	1	...	2	...	...	...	8	8
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	4	4
...	...	...	...	...	...	...	...	...	1	...	...	2	...	2	2	4
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	1	...	...	...	...	...	...	...	2	2	4
...	...	...	2	...	...	...	...	...	...	...	...	...	1	...	3	3
5	3	4	2	2	2	1	1	1	1	2	2	4	...	39	24	63
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
...	1	...	6	...	2	...	3	...	4	...	3	...	5	...	31	31
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
15		17		9		12		12		8		11				159
2		3		2		2		1		...		1				16
12		14		7		16		17		6		16				163

TABLE OF MORTALITY.—

	Jan. 7.		Jan. 14.		Jan. 21.		Jan. 28.		Feb. 4.		Feb. 11.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Under 1 year	...	57	...	61	...	43	...	58	...	63	...	52
From 1 to 2 years . . .	...	17	...	18	...	16	...	15	...	22	...	28
" 2 " 5 " . . .	...	28	...	25	...	20	...	28	...	28	...	26
" 5 " 10 " . . .	...	6	...	10	...	9	...	10	...	6	...	9
" 10 " 15 " . . .	...	2	...	2	...	3	...	...	...	1	...	3
" 15 " 20 " . . .	...	8	...	4	...	3	...	3	...	8	...	4
" 20 " 30 " . . .	16	...	18	...	20	...	10	...	14	...	25	...
" 30 " 40 " . . .	20	...	12	...	12	...	11	...	18	...	9	...
" 40 " 50 " . . .	11	...	12	...	16	...	12	...	14	...	19	...
" 50 " 60 " . . .	23	...	5	...	13	...	10	...	8	...	12	...
" 60 " 70 " . . .	12	...	11	...	14	...	7	...	7	...	10	...
" 70 " 80 " . . .	10	...	8	...	4	...	7	...	9	...	6	...
" 80 " 90 " . . .	6	...	3	...	2	...	2	...	6	...	2	...
" 90 " 100 " . . .	...	...	1	...	2	...	1	...	2	...	1	...
100 and upwards . .	...	...	...	...	...	...	...	...	...	...	1	...
Totals	98	113	70	120	88	94	60	114	78	123	85	117
Weekly mortality . . .	211		190		177		174		201		202	

FIRST QUARTER—*Continued.*

Feb. 18.		Feb. 25.		Mar. 4.		Mar. 11.		Mar. 18.		Mar. 25.		April 1.		Total first quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	58	...	60	...	60	...	66	...	55	...	42	...	54	...	729	
...	16	...	28	...	19	...	21	...	18	...	20	...	32	...	265	
...	33	...	36	...	19	...	19	...	19	...	26	...	34	...	331	
...	18	...	9	...	1	...	11	...	10	...	10	...	8	...	117	
...	1	...	3	...	1	...	3	...	5	...	5	...	4	...	33	
...	7	...	2	...	3	...	3	...	4	...	8	...	8	...	65	
10	...	18	...	19	...	19	...	27	...	21	...	16	...	233		
15	...	19	...	22	...	12	...	19	...	17	...	18	...	204		
22	...	13	...	10	...	9	...	15	...	10	...	11	...	174		
11	...	8	...	6	...	9	...	12	...	8	...	15	...	140		
11	...	17	...	7	...	13	...	8	...	4	...	7	...	128		
8	...	11	...	6	...	13	...	10	...	6	...	3	...	101		
5	...	3	...	4	...	4	...	6	...	4	...	3	...	50		
...	...	...	...	1	...	1	...	1	...	...	...	1	...	11		
...	...	3	...	...	...	...	...	...	...	...	...	1	...	5		
82	133	92	138	75	103	80	123	98	111	70	111	75	140	1046	1540	
215		230		178		203		209		181		215				2586

TABLE OF MORTALITY

Collated from Returns to the Board of

SECOND QUARTER. Commencing

	April 8.		April 15.		April 22.		April 29.		May 6.		May 13.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Abscess	...	...	...	...	...	...	...	...	...	...	...	...
" of brain	...	...	...	...	...	...	1	...	...	...	...	...
" liver	...	...	...	1	1	...	...	...	...	...	...	...
" lungs	...	...	...	...	...	1	...	...	...	...	...	...
" parotid	...	...	...	...	1	...	...	...	...	...	...	...
" psoas	...	...	...	...	...	...	...	...	...	...	...	...
Albuminuria	...	...	1	...	...	...	...	...	...	...	...	...
Anæmia	...	...	...	...	...	...	1	...	1	...	...	...
Anthrax	...	...	...	...	1	...	...	...	...	...	...	...
Apoplexy	1	...	1	...	1	...	1	...	1	1	...	...
Asphyxia	...	1	...	1	...	2	...	...	...	...	...	...
Asthma	...	...	...	...	...	1	1	1	1	...	...	...
" thymic	...	...	...	3	...	...	...	...	...	...	...	...
Cachexia	...	...	...	...	...	...	...	...	...	...	...	...
Cancer and scirrhus	...	...	...	...	1	...	...	...	...	...	...	1
" of the breast	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	...	1	...	...	...	...	...	...	...
" uterus	1	...	...	...	...	...	...	...	...	...	...	...
Cancrum oris	...	...	...	...	...	...	...	...	...	...	...	1
Caries	...	...	...	...	...	...	...	...	...	...	...	...
" of the spine	...	...	...	...	...	1	...	...	...	...	...	...
Casualties	3	...	2	...	1	2	1	...	...	3	3	1
Burns and scalds	1	...	...	2	...	...	...	...	...	2	...	...
Concussion of the brain	1	...	...	...	...	...	1	...	...	...	...	...
Drowned	...	1	2	...	...	...	1	...	3	...	...	...
Poisoning	...	...	...	...	...	...	...	...	...	...	...	...
Suicide	...	...	...	...	...	...	...	...	...	...	...	...
Childbed	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	1	...	...	...
" infantum	...	3	...	...	...	...	...	...	...	...	...	...
" morbus	...	...	...	...	...	...	...	1	...	...	...	...
Chorea	...	...	...	...	...	1	...	...	...	...	...	...
Cirrhosis	...	...	...	...	...	...	2	...	1	...	...	...
Compression of the spinal marrow	...	...	...	...	...	...	...	...	...	...	1	...
Congestion of the bowels	...	1	...	...	...	...	...	...	...	...	...	1
" brain	1	3	...	2	3	4	...	...	1	1	2	1
" liver	...	...	...	...	...	...	...	...	...	...	...	...
" lungs	...	1	1	...	1	1	1	...	...	2	...	...
Consumption of the bowels	...	...	...	...	...	...	...	1	...	...	...	...
" lungs	18	4	25	4	21	7	17	6	20	7	28	3
Convulsions	1	14	...	10	1	19	...	13	1	9	1	10
" puerperal	...	...	...	...	...	...	...	...	...	...	1	...
Coryza	...	...	...	...	...	...	...	...	...	...	...	...
Cramp	...	...	...	...	...	...	...	...	...	...	...	...
Croup	...	12	...	7	...	2	...	10	...	...	...	6
Cyanosis	...	1	...	1	...	1	...	...	...	...	...	...
Debility	4	4	1	2	4	6	3	7	4	4	2	3
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	1	...	...	...	2	...	...	...	2	1	...	...
Disease of the brain	...	..	...	1	...	2	...	2	1	1	1	...

FOR THE YEAR 1854.

Health. By W. S. W. RUSCHENBERGER, M. D.

April 8, 1854.

May 20.		May 27.		June 3.		June 10.		June 17.		June 24.		July 1.		Total second quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
...	1	...	...	...	...	...	...	...	...	...	1	...	...	1	2	3
...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	1	3
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	1	...	4	...	...	...	2	...	8	...	1	...	17	1	18
...	...	...	...	...	2	...	...	...	2	...	...	...	1	3	9	9
...	...	...	...	...	...	...	1	...	...	...	...	1	...	3	3	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	2	...	...	...	1	...	1	...	...	...	6	...	6
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	1	...	...	...	2	...	...	...	4	...	4
...	...	1	...	...	...	...	...	1	...	1	...	...	...	3	...	3
1	1	...	...	...	2	...	...	...	...	...	...	...	...	1	4	5
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
1	1	2	3	1	...	1	...	2	...	1	...	5	...	28	7	30
...	1	...	...	...	1	...	1	...	1	...	1	...	...	1	9	10
...	...	...	...	...	...	1	...	...	...	...	...	...	...	3	...	3
...	1	3	6	2	1	5	...	3	1	1	1	1	2	20	14	34
...	...	...	...	1	...	...	...	...	...	...	1	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
1	...	...	...	...	...	...	...	...	...	1	...	1	...	3	...	3
...	...	...	...	...	...	...	...	...	...	1	1	10	1	19	2	21
...	1	...	3	...	2	...	4	...	4	...	14	...	49	...	81	81
...	...	2	...	...	...	...	...	...	...	2	2	2	2	6	5	11
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
...	1	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	3	3	1	...	2	...	...	...	2	...	1	2	2	18	22	35
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
...	...	1	1	...	1	...	...	...	1	2	...	...	1	6	8	14
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
18	3	14	2	16	9	21	7	17	4	24	4	17	4	256	64	320
...	8	2	6	1	8	2	20	...	4	4	11	1	15	14	147	191
2	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	6	...	3	...	5	...	...	...	4	...	7	...	8	...	70	70
...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	6	6
1	1	6	2	2	5	3	5	3	4	4	2	3	10	40	55	95
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
1	...	...	3	1	2	3	...	2	1	1	4	...	7	13	18	31
...	1	...	...	...	2	...	4	1	1	...	4	...	...	2	18	20

TABLE OF MORTALITY.—

	April 8.		April 15.		April 22.		April 29.		May 6.		May 13.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Disease of the chest	...	...	...	...	...	...	1	1	...	1	...	...
" heart	5	2	2	...	1	1	2	1	2	1	2	...
" kidneys	...	...	...	...	...	...	1	1	1	...	...	...
" lungs	...	...	...	...	...	2	...	...	1	...	...	...
" ovaria	...	...	...	...	...	...	...	...	1	...	...	...
" spine	...	...	...	...	...	...	1	...	...	...	...	...
" stomach and bowels	...	...	...	...	1	...	...	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	1	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...
Dropsy	2	1	...	1	...	2	...	...	1	1	...	...
" abdominal	1	...	...	...	1	1	...	...	...	...	...	...
" of the brain	...	9	...	5	1	10	...	7	...	4	...	4
" chest	2	...	...	...	...	...	2	...	2	...	...	...
" heart	...	...	...	...	1	...	...	...	...	...	...	...
" ovaria	...	...	...	...	...	...	...	...	...	...	1	...
Dysentery	...	1	...	...	2	1	...	...	1	3	1	...
Dyspepsia	...	...	...	...	1	...	...	...	...	...	...	...
Effusion	...	...	...	...	...	...	...	...	...	1	...	...
" on the brain	1	2	...	...	1	...	...	...	...	2	...	3
" chest	...	...	...	...	...	...	...	1	...	...	...	...
" heart	...	...	...	...	...	...	...	...	...	1	...	...
" lungs	...	...	...	1	...	...	1	1	...	...	...	...
Emphysema	1	...	...	...	...	...	...	...	...	...	...	...
Enlargement of the cervical glands	...	...	...	...	...	1	...	...	...	...	...	...
" heart	...	...	...	...	...	...	...	...	...	...	1	...
" liver	...	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	...	...	...	...	2	...	...	...	...	...	...	...
Erysipelas	...	2	1	1	4	...	...	1	3	...	2	1
Fever	...	...	...	...	...	1	...	...	...	...	1	...
" bilious	1	...	...	...	...	...	...	...	...	...	...	...
" congestive	...	...	...	...	...	...	...	...	...	...	...	...
" continued	...	...	...	...	...	...	...	...	...	...	...	...
" hectic	1	...	...	...	...	...	...	...	...	2	...	...
" nervous	...	...	...	...	...	...	...	...	...	...	...	...
" puerperal	...	...	...	...	...	...	1	...	1	...	2	...
" remittent	...	...	...	1	...	...	...	1	...	3	...	1
" scarlet	...	8	...	2	...	4	...	2	...	3	...	3
" typhoid	...	3	2	2	3	...	2	3	3	2	2	2
" typhus	...	...	2	...	2	...	1	1	1	...	1	...
Fracture of the arm	...	...	...	...	...	...	...	...	...	...	...	...
" leg	...	...	...	...	...	...	...	...	...	...	...	...
" skull	...	...	...	..	...	...	...	...	...	...	...	...
Fungus hæmatodes	...	...	...	...	...	...	...	...	...	...	...	...
Gangrene	1	...	...	...	...	...	...	...	...	...	1	2
" of the lungs	...	...	...	...	...	...	1	...	...	...	...	...
Hemorrhage	1	...	...	...	...	...	...	...	1	...	...	1
" from the lungs	...	...	1	...	...	...	...	...	1	...	1	...
" stomach and bowels	...	...	1	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	1	...	...	...
Hernia	...	...	1	...	...	...	...	...	...	...	...	...
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...
Hypochondriasis	...	...	...	...	...	...	...	...	...	...	...	...
Icterus	...	1	...	...	...	...	...	...	1	...	...	1

SECOND QUARTER—*Continued.*

May 20.		May 27.		June 3.		June 10.		June 17.		June 24.		July 1.		Total second quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	3	4
2	1	2	...	3	...	8	1	1	2	...	1	1	2	26	12	38
...	...	...	...	...	...	1	...	...	...	...	...	2	...	5	1	6
...	1	1	...	1	...	...	...	1	1	1	...	...	...	5	4	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	1	...	...	...	...	1	...	1	...	...	...	...	3	2	5
1	1	...	...	...	...	...	...	...	...	...	1	...	...	2	2	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	1	...	1	...	...	...	3	...	3
...	...	3	...	4	...	...	1	1	...	...	4	2	1	13	11	24
1	...	...	1	3	1	1	...	...	2	...	...	...	...	7	5	12
...	5	...	12	...	5	...	4	...	7	...	...	...	4	1	76	77
1	...	...	...	...	...	...	...	1	...	1	...	1	...	10	...	10
...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
3	...	1	1	2	5	...	1	...	7	3	4	2	13	15	26	41
...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	1	...	...	...	1	...	2	1	2	...	1	...	2	4	16	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	1	...	1	1	4	1	5
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	1	1	...	...	...	...	...	3	1	4
...	1	1	...	2	...	...	1	...	...	...	...	...	1	13	8	21
...	...	...	...	...	...	...	...	1	...	...	...	2	...	4	1	5
...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	1	...	1	...	1	...	...	...	1	...	3	...	3
...	...	...	1	1	2	1	...	...	1	...	1	...	...	2	11	13
...	...	...	3	...	3	...	3	...	2	...	4	...	3	...	40	40
4	1	1	1	1	...	1	1	...	...	...	...	4	2	28	17	40
2	...	1	...	2	...	2	2	1	...	4	...	1	...	20	3	23
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	1	...	2	...	2
...	...	1	...	...	...	...	...	...	...	...	1	...	...	2	...	2
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	3	2	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	1	...	...	...	...	...	...	...	1	...	1	...	..	3	4	7
1	...	1	...	...	1	1	...	...	...	...	...	...	...	6	1	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	1	...	1	1	...	...	3	1	4
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	4

TABLE OF MORTALITY.—

	April 8.		April 15.		April 22.		April 29		May 6.		May 13.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Ileus	...	...	...	...	...	...	...	...	...	...	1	...
Inanition	...	...	1	...	...	2	...	...	...	...	...	1
Inflammation	...	...	...	...	...	...	...	...	...	...	...	...
" of the bladder	...	...	...	...	...	...	1	...	...	...	...	...
" brain	2	9	...	7	1	7	1	5	...	5	1	4
" breast	...	...	...	...	...	...	...	...	...	...	...	...
" bronchi	1	4	1	7	...	10	9	8	1	...	1	6
" chest	...	...	...	...	...	1	...	1	...	...	...	...
" heart	...	...	...	...	...	...	...	...	...	...	...	...
" liver	2	...	...	...	...	...	1	...	1	1	2	...
" lungs	3	10	...	...	7	10	...	10	5	10	1	10
" peritoneum	...	2	...	...	1	...	...	...	...	...	1	...
" pleura	...	1	1	...	...	...	...	1	...	...	2	...
" spleen	...	...	1	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	3	...	7	3	3	...	...	...	...	...	...
" tonsils	...	...	...	...	...	...	1	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	1	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	1	...	1	1	...	...	...	...	...	...
Intemperance	2	...	...	...	1	...	2	...	4	...	2	...
Intussusception	...	...	...	1	...	...	...	...	...	...	...	...
Irritation of the brain	...	...	...	...	...	...	...	...	1	...	...	...
Malformation	...	...	...	...	...	1	...	3	...	...	...	...
" of the heart	...	1	...	1	...	...	...	...	...	1	...	...
Mania	...	...	...	...	...	...	1	...	...	...	...	...
Mania à potu	...	...	...	...	1	...	1	...	1	...	...	...
Mania puerperal	...	...	1	...	...	...	...	...	...	...	...	...
Marasmus	...	4	...	3	2	2	...	9	1	3	1	12
Measles	...	3	...	2	...	5	...	1	1	2	...	3
Melæna	...	...	...	...	...	...	...	...	...	...	...	...
Obstruction of the bowels	...	...	...	...	...	...	...	...	...	...	...	...
Old age	4	...	4	...	4	...	3	...	2	...	3	...
Palsy	1	...	1	...	3	...	4	...	1	1	2	...
Purpura	...	...	...	...	...	...	2	1	...	...	1	...
Rheumatism	1	...	...	...	...	...	...	1	...	...	...	...
Scrofula	...	...	...	...	...	1	2	...	...	...	...	...
Smallpox	1	3	...	...	...	...	...	1	1	1	1	1
Softening of the brain	...	...	...	...	...	...	1	...	...	...	...	...
" heart	...	...	...	...	...	...	...	..	...	...	...	...
" spine	...	...	...	...	...	...	...	...	...	...	...	...
Spina bifida	...	...	...	...	...	...	...	...	...	...	...	...
Still-born	...	8	...	7	...	9	...	18	...	10	...	9
Strangulation	...	...	...	...	...	...	...	...	...	...	1	...
Tabes mesenterica	...	...	...	1	...	...	...	1	...	...	...	...
Teething	...	1	...	...	...	...	...	...	...	...	...	...
Tetanus	...	...	...	...	...	...	...	...	...	...	...	...
Trismus	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis	...	...	1	...	...	...	...	...	1	...	1	1
Tumor	...	...	...	...	...	...	1	...	...	...	...	...
" uterine	...	...	...	...	...	...	1	...	...	...	...	...
Tympanitis	...	...	1	...	...	...	...	1	...	...	...	...
Ulceration of the larynx	...	...	...	1	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	2	...	...	1
Unknown	5	4	...	...	1	1	1	1	4	5	3	...
Whooping-cough	...	...	...	3	...	6	...	6	...	...	...	3

SECOND QUARTER—*Continued.*

May 20.		May 27.		June 3.		June 10.		June 17.		June 24.		July 1.		Total second quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	2	1	8	...	...	...	1	...	...	...	2	...	2	2	14	16
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	4	...	8	2	7	1	6	2	5	1	6	2	9	14	82	96
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
1	4	1	2	1	1	...	1	...	4	...	4	2	3	18	54	72
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	3
1	...	...	1	...	...	...	...	...	...	...	1	...	...	1	2	3
1	...	1	...	...	...	1	...	...	...	...	...	...	...	9	1	10
3	4	3	7	...	7	2	8	5	8	...	5	...	...	29	89	118
...	...	1	...	2	...	...	...	1	...	1	...	2	...	9	2	11
...	...	...	...	...	...	1	...	...	...	1	...	...	...	5	2	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	...	3	...	...	...	2	3	1	...	3	1	2	8	24	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
...	...	1	...	2	...	1	...	...	...	...	...	...	...	15	...	15
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	1	...	1	...	...	...	...	...	3	...	...	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	...	...	2	...	...	...	...	...	3	...	3
...	...	1	...	...	...	...	...	3	...	3	...	1	...	11	...	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	6	...	7	...	6	2	4	1	3	...	9	...	9	8	77	85
...	2	...	...	...	...	...	...	...	3	...	2	...	1	1	25	26
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
6	...	1	...	4	...	3	...	3	...	4	...	3	...	44	...	44
1	...	2	1	...	...	2	...	2	...	1	...	1	...	21	2	23
...	1	1	...	...	1	...	...	...	...	...	...	...	...	4	3	7
...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	2	4
...	...	...	2	...	...	...	...	...	1	...	1	...	...	2	5	7
...	1	...	...	...	2	...	...	...	2	...	1	...	1	3	13	16
...	...	...	...	...	...	...	...	...	...	2	...	...	...	3	...	3
...	...	...	...	...	...	1	...	...	...	...	..	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	7	...	9	...	8	...	8	...	8	...	13	...	13	...	127	127
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	1	...	...	...	1	...	...	...	1	...	...	...	4	4
...	...	...	...	...	...	1	...	1	...	...	...	...	1	2	1	3
...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	2	2
1	1	1	...	...	...	1	...	...	1	...	1	...	...	6	4	10
...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	2
...	...	...	...	...	...	1	...	...	...	1	...	...	1	4	2	6
5	2	6	3	3	2	2	3	2	4	1	4	...	3	33	32	65
...	2	...	4	...	1	...	5	...	6	...	5	...	4	...	45	45

TABLE OF MORTALITY.—

	April 8.		April 15.		April 22.		April 29.		May 6.		May 13.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
From the Almshouse	8		10		10		17		18		15	
From the country	1		2		...		...		2		...	
People of color	15		10		15		16		18		10	
Under 1 year	...	56	...	41	...	57	...	71	...	44	...	42
From 1 to 2 years	...	22	...	17	...	31	...	18	...	18	...	18
" 2 " 5 "	...	29	...	17	...	20	...	20	...	24	...	19
" 5 " 10 "	...	14	...	8	...	14	...	11	...	10	...	10
" 10 " 15 "	...	2	...	2	...	5	...	1	...	4	...	...
" 15 " 20 "	...	4	...	2	...	6	...	9	...	4	...	8
" 20 " 30 "	11	...	18	...	14	...	15	...	21	...	22	...
" 30 " 40 "	17	...	19	...	17	...	13	...	15	...	19	...
" 40 " 50 "	10	...	8	...	13	...	17	...	22	...	16	...
" 50 " 60 "	11	...	7	...	15	...	14	...	...	...	11	...
" 60 " 70 "	7	...	8	...	10	...	8	...	9	...	5	...
" 70 " 80 "	13	...	4	...	10	...	3	...	13	...	4	...
" 80 " 90 "	2	...	2	...	4	...	4	...	4	...	3	...
" 90 " 100 "	1	...	3	...	...	...	2	...	3	...	...	...
100 and upwards	...	...	1	...	1	...	1	...	...	...	...	...
Totals	72	127	60	87	84	133	77	130	87	104	80	97
Weekly mortality	199		147		217		207		191		177	

SECOND QUARTER—*Continued.*

May 20.		May 27.		June 3.		June 10.		June 17.		June 24.		July 1.		Total second quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
13		11		16		12		20		15		12				257
...		...		...		1		...		2		2				10
13		14		10		10		12		13		11				167
...	39	...	47	...	48	...	53	...	39	...	68	...	117	...	717	
...	13	...	16	...	16	...	21	...	26	...	22	...	80	...	268	
...	15	...	26	...	22	...	21	...	22	...	24	...	23	...	282	
...	8	...	5	...	9	...	10	...	8	...	10	...	6	...	123	
...	5	...	6	...	2	...	...	...	4	...	4	...	4	...	89	
...	3	...	6	...	8	...	9	...	6	...	8	...	8	...	81	
16	...	16	...	21	...	21	...	19	...	27	...	24	...	240		
10	...	17	...	13	...	15	...	13	...	21	...	21	...	210		
15	...	8	...	5	...	16	...	14	...	13	...	11	...	168		
6	...	6	...	7	...	8	...	11	...	8	...	6	...	110		
10	...	13	...	9	...	8	...	9	...	11	...	6	...	108		
8	...	7	...	9	...	4	...	4	...	3	...	5	...	87		
3	...	4	...	1	...	2	...	2	...	8	...	6	...	40		
1	...	...	...	1	...	...	...	...	...	...	...	1	...	12		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	8		
69	83	71	106	66	100	74	114	72	105	86	136	80	188	978	1510	1488
152		177		166		188		177		222		268				

TABLE OF MORTALITY

Collated from Returns to the Board of

THIRD QUARTER. Commencing

	July 8.		July 15.		July 22.		July 29.		Aug. 5.		Aug. 12.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Abscess	...	...	1	...	1	...	...	...	...	...	1	...
" of the liver	...	...	...	...	...	...	1	...	...	...	...	...
" lumbar	...	...	...	...	...	...	...	...	...	...	...	...
" of lungs	...	...	...	...	...	...	...	...	...	...	1	...
" psoas	...	...	...	...	...	...	...	...	1	...	...	...
Albuminuria	1	...	...	...	1	...	...	...	1	...	...	...
Angina pectoris	...	...	...	...	...	1	...	...	1	...	...	...
Aneurism of the aorta	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	8	...	3	...	2	...	6	...	5	...	1	...
Aphthæ	...	...	...	...	...	1	...	...	...	...	...	...
Asthma	...	...	...	...	...	...	1	...	2	...	...	...
Cachexia	...	...	...	...	...	...	...	...	1	...	...	...
Cancer and scirrhus	...	...	3	...	...	...	1	...	...	...	...	...
" of the breast	1	...	...	...	...	...	...	...	...	...	...	...
" " stomach and bowels	...	...	...	...	...	...	1	...	1	...	...	...
" " liver	1	...	...	...	...	...	...	...	...	...	...	...
" " rectum	...	...	...	...	1	...	...	...	...	...	...	...
" " uterus	...	...	...	...	...	...	...	...	...	...	...	...
Cancrum oris	...	...	...	...	...	...	...	...	...	...	...	...
Caries	...	...	...	...	...	...	...	...	...	1	...	...
Casualties	4	...	3	...	1	1	5	...	1	1	3	1
Burns and scalds	...	...	...	...	...	...	...	...	...	1	...	...
Concussion of the brain	...	1	...	...	1	...	...	...	...	...	1	...
Drowned	2	4	1	3	...	2	2	1	1	5	2	2
Poisoning	...	...	...	...	...	...	...	...	1	...	...	...
Suicide	1	...	...	...	1	...	...	...	...	...	...	...
Childbed	2	...	...	...	...	...	...	...	...	...	...	...
Cholera	19	3	61	8	47	14	60	10	70	18	52	18
" infantum	...	51	...	83	...	81	...	106	...	70	...	52
" morbus	5	1	4	2	5	2	6	8	7	5	10	2
Cirrhosis	...	...	...	...	...	...	...	...	...	...	1	...
Colic	...	...	...	...	...	...	...	...	...	...	...	...
Coma	...	...	2	...	...	...	...	...	...	...	...	...
Congestion of the brain	8	4	3	2	1	6	7	10	8	8	1	7
" " liver	...	...	...	...	...	...	1	...	...	...	...	...
" " lungs	...	1	...	2	...	1	1	1	...	...	...	...
Consumption of the bowels	...	...	...	...	...	...	...	...	...	...	...	...
" " lungs	17	13	24	5	34	8	23	5	23	8	17	5
Convulsions	2	22	...	17	1	25	2	24	1	21	1	18
" puerperal	...	...	...	...	...	...	...	...	...	...	...	...
Cramp	...	...	...	...	...	...	...	...	...	1	...	...
Croup	...	2	...	1	...	2	...	...	...	1	...	2
Coup de soleil	3	...	2	...	...	...	27	...	1	...	1	...
Cyanosis	...	1	...	2	...	...	...	...	...	1	...	...
Debility	6	9	10	14	5	7	9	12	4	15	5	10
Dementia	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	2	7	3	15	1	12	4	17	6	10	3	11
Disease of the brain	1	3	...	...	1	4	2	3	...	3	...	2
" chest	...	...	...	...	...	...	...	...	...	...	...	...
" heart	4	1	1	...	2	1	2	...	1	...	2	3

FOR THE YEAR 1854.

Health. By W. S. W. RUSCHENBERGER, M. D.

July 8, 1854.

Aug. 19.		Aug. 26		Sept. 2.		Sept. 9.		Sept. 16.		Sept. 23.		Sept. 30.		Total third quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	...	...	...	1	...	...	...	...	...	...	...	...	...	4	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	1	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	1	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	1	3
...	...	1	...	...	...	...	...	1	...	...	...	...	...	2	...	2
8	...	1	...	1	...	4	...	1	1	2	...	1	...	38	1	39
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	...	...	1	2	...	...	...	1	...	...	...	...	4	4	8
...	...	1	2	...	...	...	...	...	...	...	...	...	...	2	2	4
1	...	1	...	...	...	...	...	...	...	...	...	2	...	8	...	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	...	...	...	...	1	...	...	...	4	...	4
...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	1	...	1	...	1	...	1	...	...	...	...	...	...	...	4	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
2	1	3	2	1	...	...	...	3	...	4	1	3	...	33	7	40
...	...	3	...	1	1	...	2	...	...	...	...	...	...	4	4	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
3	2	4	3	2	4	1	3	3	2	1	...	2	...	24	31	55
...	...	...	1	...	...	...	2	...	1	...	...	...	...	1	4	5
...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
27	6	20	2	16	7	10	1	11	...	17	3	18	2	428	87	515
...	38	...	37	...	33	...	18	...	29	...	15	...	8	...	621	621
1	3	7	1	8	1	1	1	2	1	1	3	5	4	62	34	96
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	2	...	...	...	...	...	2	1	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
1	2	1	6	1	3	3	5	3	3	3	3	3	3	33	62	95
...	...	...	...	2	...	...	1	...	...	...	...	...	1	3	2	5
1	1	...	...	...	...	...	...	...	1	1	...	...	3	3	10	13
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
23	4	13	2	20	5	21	2	...	...	23	3	20	6	258	66	324
...	24	...	12	...	14	...	7	1	12	...	18	...	7	8	221	229
...	...	...	...	1	...	...	...	...	...	1	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	3	...	5	...	4	...	1	...	2	...	2	...	3	...	28	28
...	...	...	...	1	...	...	...	...	...	...	...	...	...	35	...	35
...	...	...	3	...	...	...	1	...	...	...	...	...	...	...	3	3
4	3	6	5	3	1	7	5	7	2	6	2	7	6	84	96	180
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	4	6	5	3	3	1	1	4	3	6	7	3	4	43	104	147
...	1	1	2	...	3	1	1	...	1	...	...	...	...	6	23	29
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	1	...	...	1	...	2	...	...	...	2	...	2	1	19	7	26

TABLE OF MORTALITY.—

	July 8.		July 15.		July 22.		July 29.		Aug. 5.		Aug. 12.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Disease of the hip	...	...	...	...	...	...	...	...	...	...	...	1
" kidneys	...	...	...	...	...	...	1	...	1	...	...	...
" liver	...	...	1	...	1	...	...	...	...	...	1	...
" lungs	1	2	1	1	1	...	...	2	1	2	1	...
" mouth	...	...	...	2	...	...	...	...	...	...	...	...
" ovaria	...	...	...	...	...	...	...	...	...	...	...	...
" parotids	...	...	...	1	...	...	...	...	...	...	...	...
" spine	...	...	...	...	...	...	...	1	...	...	...	...
" stomach and bowels	...	...	...	...	1	...	...	...	...	...	1	...
" uterus	1	...	...	...	...	...	...	...	...	...	...	...
Dropsy	2	2	1	...	8	...	2	1	1	1	2	1
" abdominal	...	...	2	...	1	...	2	...	2	...	...	...
" of the brain	...	8	...	10	1	6	...	14	...	11	...	5
" chest	1	...	...	...	1	...	1	2	1	...	...	...
" heart	...	2	1	...	...	...	...	...	...	...	1	...
Dysentery	4	12	8	17	9	20	21	20	14	15	12	15
Dyspepsia	...	...	...	...	...	...	...	...	...	...	...	...
Effusion	...	...	...	...	...	...	...	...	...	...	...	...
" on the brain	...	5	1	5	1	4	1	5	1	1	...	1
Enlargement of the heart	1	...	...	...	1	...	...	...	1	...	...	1
Epilepsy	...	...	1	...	...	...	2	...	1	...	...	...
Erysipelas	1	1	...	2	...	1	...	1	1	...	...	1
Fever	...	...	...	...	...	1	1	...	...	...	1	...
" adynamic	1	...	...	...	...	...	...	...	...	...	...	...
" bilious	...	1	1	...	...	...	...	...	...	...	...	...
" " remittent	...	...	...	...	...	...	...	...	...	...	...	...
" cerebral	...	...	...	...	...	...	...	...	...	...	...	...
" congestive	1	1	...	...	...	...	1	...	1	...	1	...
" continued	1	...	...	...	...	...	...	...	...	...	...	...
" hectic	...	...	...	...	...	...	...	...	...	...	...	...
" intermittent	...	...	...	...	...	...	...	1	...	...	...	...
" malignant	...	...	...	...	...	...	...	...	...	...	...	...
" nervous	...	...	...	...	...	...	...	...	...	...	...	...
" puerperal	1	...	...	...	...	...	1	...	1	...	...	...
" remittent	...	...	...	1	...	...	...	...	2	...	...	1
" scarlet	...	1	...	2	...	...	...	...	...	1	...	1
" typhoid	...	2	...	...	2	...	1	1	4	2	...	...
" typhus	2	...	...	1	1	1	...	2	2	...	1	...
" yellow	...	...	...	...	...	...	...	...	...	...	...	...
Fracture	...	...	...	...	...	...	...	...	...	...	...	...
" of the arm	...	...	...	...	...	...	...	...	...	...	...	...
" leg	...	...	...	...	1	...	1	...	...	...	...	...
" skull	...	...	...	1	...	...	1	...	...	...	...	...
Fungus hæmatodes	...	...	...	...	...	...	1	...	...	...	...	1
Gangrene	1	...	...	...	...	...	...	...	...	...	...	...
" of the lungs	...	...	...	...	...	...	...	...	...	...	...	...
Hemorrhage	...	...	1	...	...	...	...	2	...	...	...	...
" from the lungs	...	...	...	...	...	...	1	...	...	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	1	...	1	...
" uterus	1	...	...	...	1	...	1	...	1	...	1	...
Hernia	...	...	...	...	...	...	...	...	1	...	1	...
Hysteria	...	...	...	...	...	...	1	...	...	...	...	...
Icterus	1	...	1	...	2	1	...	...	...	...	1	...

THIRD QUARTER—*Continued.*

Aug. 19.		Aug. 26.		Sept. 2.		Sept. 9.		Sept. 16.		Sept. 23.		Sept. 30.		Total third quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	1	...	...	...	1	1	5	1	6
...	...	1	...	...	...	...	1	...	...	...	1	...	...	6	9	15
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	2
...	...	...	...	...	...	...	1	...	1	...	...	...	...	2	2	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	...	...	...	2	...	2	1	...	1	1	1	3	...	21	8	29
1	2	...	...	1	...	...	...	2	...	1	...	1	...	13	2	15
...	9	...	12	...	7	1	3	...	3	...	3	...	5	2	96	98
...	...	...	...	...	...	1	...	...	...	1	...	...	...	6	2	8
...	...	...	...	1	...	...	...	2	...	...	...	...	...	5	2	7
9	27	8	13	16	13	7	11	5	8	8	12	9	7	130	190	320
...	...	...	...	1	...	...	...	...	...	...	...	1	...	2	...	2
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	3	...	...	...	3	...	3	...	1	...	3	1	...	5	34	39
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
1	...	...	...	...	...	...	...	1	...	...	...	...	...	6	...	6
1	1	1	...	...	...	...	...	2	1	...	...	2	...	8	8	16
...	...	...	...	1	...	...	...	4	...	...	...	...	...	7	1	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	...	2	...	1	...	...	...	2	...	2	1	...	2	10	4	14
...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	1	2
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	4	2	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
...	1	...	...	...	...	...	...	...	1	...	...	1	...	1	3	4
...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	2	2
...	...	...	...	...	...	1	1	...	...	...	...	...	...	1	1	2
1	...	...	...	...	...	...	...	1	...	...	...	1	...	6	...	6
2	...	1	...	...	...	1	...	1	...	1	3	...	...	8	5	13
...	...	...	...	...	1	...	1	...	1	...	1	...	...	...	9	9
1	1	4	1	6	8	8	4	...	1	3	1	4	...	28	21	49
...	...	2	2	...	...	1	...	3	...	1	...	3	2	16	8	24
...	...	...	1	2	...	...	...	1	...	5	...	3	...	11	1	12
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	4
1	...	...	...	...	...	...	...	1	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	3
1	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	6
...	...	...	...	1	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	1	...	...	...	...	...	...	1	7	2	9

TABLE OF MORTALITY.—

	July 8.		July 15.		July 22.		July 29.		Aug. 5.		Aug. 12.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Inanition	1	1	...	2	...	1	...	3	...	...	...	1
Inflammation	1	...	...	...	...	1	...	1	...	...	...	...
" of the bladder	...	...	...	...	1	...	...	...	...	...	...	...
" brain	3	18	...	8	...	9	3	17	2	10	...	3
" bronchi	...	3	1	2	1	2	...	1	...	1	...	4
" fauces	...	1	...	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	...	...	2	...	...	...	...	...
" larynx	...	...	...	...	...	1	...	...	...	...	...	2
" liver	...	...	...	...	...	...	...	...	...	...	...	...
" lungs	3	7	1	6	...	2	4	...	2	2	1	1
" peritoneum	2	1	...	...	...	1	3	1	...	...	...	...
" pleura	...	...	...	1	...	...	...	...	...	...	1	...
" stomach and bowels	1	3	...	5	5	5	2	4	2	4	...	...
" uterus	...	1	...	...	...	...	...	...	...	...	1	...
Insanity	...	...	...	...	...	...	...	...	...	...	...	...
Intemperance	3	...	2	...	1	...	...	...	5	...	1	...
Intussusception	...	...	...	...	...	...	...	...	...	...	...	...
Irritation of brain	...	...	...	...	...	...	...	...	...	...	...	1
Leprosy	...	...	...	...	...	...	...	...	...	1	...	...
Malformation	...	...	...	1	...	...	...	1	...	2	...	...
Mania	1	...	2	...	...	...	...	...	1	...	...	...
Mania à potu	1	...	2	...	3	...	3	...	1	...	2	...
Mania, puerperal	...	...	...	...	...	...	...	...	...	...	...	...
Marasmus	3	19	1	9	2	23	1	16	...	20	...	16
Measles	...	3	...	...	...	...	...	1	...	...	...	...
Menorrhagia	...	...	...	...	...	...	...	...	...	...	...	...
Neuralgia	...	...	...	...	...	...	1	...	...	...	...	...
Obesity	1	...	...	...	...	...	...	...	...	...	...	...
Obstruction of the bowels	...	...	1	...	2	...	1	...	...	...	...	...
Old age	5	...	3	...	4	...	7	...	12	...	4	...
Onanism	...	...	...	...	...	...	...	1	...	...	...	...
Palsy	2	...	3	...	1	1	1	...	3	...	3	...
Phlebitis	...	...	...	1	...	...	...	...	...	...	...	...
Phlegmasia dolens	1	...	...	...	...	...	...	...	...	...	...	...
Purpura	...	...	...	...	...	...	...	...	...	...	...	1
Rheumatism	...	...	...	...	...	...	2	...	...	...	...	...
Rupture of the heart	1	...	...	...	...	...	...	...	...	...	...	...
Scorbutus	2	...	1	...	...	...	...	...	...	...	...	...
Scrofula	...	1	1	...	...	...	...	1	...	...	...	...
Smallpox	...	1	...	...	...	...	1	1	...	...	...	...
Softening of the brain	...	...	...	...	...	...	2	...	...	...	1	...
" stomach	...	...	...	...	...	...	...	...	...	...	...	...
Spina bifida	...	...	...	...	...	...	...	...	...	...	...	...
Spinal meningitis	...	...	...	...	...	...	...	...	...	...	...	...
Still-born	...	10	...	6	...	8	...	17	...	5	...	10
Suffocation	...	...	1	...	2	...	1	1	...	...	...	...
Syphilis	...	...	...	...	1	...	...	...	...	...	...	...
Tabes mesenterica	...	1	...	...	...	2	...	2	...	2	...	3
Teething	...	...	...	...	...	4	...	1	...	6	...	1
Tetanus	...	...	...	...	1	...	...	...	...	...	...	...
Trismus	...	...	...	...	...	1	...	...	...	...	...	...
Tuberculosis	...	...	1	1	...	...	...	1	1	...	...	...

THIRD QUARTER—*Continued.*

Aug. 19.		Aug. 26.		Sept. 2.		Sept. 9.		Sept. 16.		Sept. 23.		Sept. 30.		Total third quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Total.
...	3	...	1	...	...	...	2	...	1	1	3	...	...	2	18	20
...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	3	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	8	...	9	2	6	2	4	5	9	2	5	...	5	19	106	125
...	3	...	2	...	1	...	...	...	...	2	...	...	1	4	20	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	3	5
...	1	1	...	...	...	2	...	...	...	1	...	...	...	2	3	5
2	2	1	4	2	5	1	4	3	7	...	...	...	4	20	44	64
1	...	...	...	2	...	1	1	1	...	...	...	...	...	10	4	14
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1	1	5	2	...	1	2	1	1	2	1	5	3	1	23	34	57
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...	2
5	...	8	...	8	...	8	...	...	...	4	...	...	...	30	...	30
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	6	6
1	...	1	...	...	...	...	...	...	...	...	...	...	...	6	...	6
1	...	1	...	1	...	2	...	...	...	1	...	1	...	19	...	19
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
1	10	...	23	...	17	...	14	...	16	...	17	...	10	8	210	218
...	2	...	...	...	...	...	...	...	...	...	1	...	...	...	7	7
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	5	...	5
4	...	4	...	6	...	1	...	...	...	7	...	4	...	61	...	61
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
3	1	3	...	1	1	3	1	...	...	2	...	3	...	28	4	32
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	2	...	1	...	...	...	6	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	1	1	1	1	...	1	1	...	...	...	...	...	1	4	6	10
...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	3	4
...	1	...	...	...	...	...	...	...	...	2	...	...	...	5	1	6
...	2	1	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	14	...	13	...	11	...	10	...	4	...	10	...	14	...	132	132
...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	2	...	4	...	...	...	2	...	...	...	1	...	...	...	19	19
...	1	...	...	...	3	...	...	...	...	...	1	...	1	...	18	18
...	...	...	1	...	1	...	...	...	...	...	...	...	...	1	2	3
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	2
1	...	...	...	...	...	...	...	...	...	1	1	...	...	4	3	7

TABLE OF MORTALITY.—

	July 8.		July 15.		July 22.		July 29.		Aug. 5.		Aug. 12.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Tumor, ovarian	1	...	...	...	...	...	...	...	...	...	...	...
Ulceration	...	...	...	...	...	...	...	...	...	...	...	...
" of stomach and bowels	1	...	...	...	...	...	1	...	...	...	...	...
" throat	...	1	...	...	...	...	...	...	...	...	...	1
Unknown	5	7	3	4	2	7	6	5	5	6	2	4
Whooping-cough	...	...	...	4	...	4	...	5	...	5	...	4
Worms	...	...	...	...	...	...	...	...	...	1	...	...
From the almshouse	88		59		45		88		52		28	
From the country	4		2		2		5		6		2	
People of color	24		20		24		28		15		19	
Under 1 year	...	117	...	147	...	139	...	187	...	125	...	98
From 1 to 2 years	...	50	...	47	...	69	...	79	...	74	...	57
" 2 " 5 "	...	36	...	29	...	34	...	37	...	33	...	31
" 5 " 10 "	...	12	...	6	...	16	...	12	...	19	...	10
" 10 " 15 "	...	6	...	6	...	6	...	6	...	9	...	9
" 15 " 20 "	...	12	...	12	...	10	...	8	...	7	...	5
" 20 " 30 "	32	...	34	...	41	...	64	...	42	...	32	...
" 30 " 40 "	37	...	34	...	40	...	56	...	46	...	37	...
" 40 " 50 "	21	...	32	...	30	...	47	...	45	...	28	...
" 50 " 60 "	14	...	20	...	22	...	28	...	18	...	15	...
" 60 " 70 "	17	...	20	...	10	...	23	...	23	...	18	...
" 70 " 80 "	9	...	17	...	7	...	12	...	14	...	14	...
" 80 " 90 "	3	...	7	...	6	...	10	...	7	...	3	...
" 90 " 100 "	2	...	2	...	2	...	4	...	7	...	1	...
100 and upwards	...	...	...	...	...	...	...	...	...	...	...	...
Totals	135	233	166	247	158	274	244	329	202	267	148	210
Weekly mortality	368		413		432		573		469		358	

THIRD QUARTER—*Continued.*

Aug. 19.		Aug. 26.		Sept. 2.		Sept. 9.		Sept. 16.		Sept. 23.		Sept. 30.		Total third quarter, 1854.		
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Mingrs.	Adults.	Minors.	Total.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	...	...	...	...	...	...	1	1	...	...	1	...	...	3	2	5
...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	3	4
3	5	8	7	5	3	2	8	3	4	6	7	3	5	53	72	125
...	4	...	6	...	2	...	4	...	2	...	4	...	7	...	51	51
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
19		21		18		22		18		18		22				898
1		1		...		1		...		1		...				25
14		28		16		14		18		15		18				248
...	101	...	97	...	65	...	55	...	59	...	62	...	58	...	1310	
...	62	...	52	...	62	...	48	...	38	...	42	...	23	...	698	
...	21	...	19	...	20	...	17	...	19	...	25	...	19	...	340	
...	11	...	14	...	14	...	10	...	5	...	4	...	9	...	142	
...	7	...	6	...	4	...	5	...	5	...	4	...	5	...	78	
...	6	...	7	...	9	...	5	...	4	...	7	...	7	...	99	
28	...	40	...	36	...	24	...	26	...	25	...	29	...	458		
25	...	16	...	29	...	27	...	19	...	25	...	23	...	414		
26	...	19	...	20	...	15	...	14	...	24	...	20	...	341		
19	...	18	...	21	...	14	...	12	...	15	...	19	...	255		
11	...	11	...	12	...	9	...	12	...	11	...	11	...	188		
9	...	9	...	6	...	6	...	7	...	16	...	9	...	135		
1	...	7	...	1	...	3	...	6	...	9	...	5	...	68		
1	...	1	...	3	...	1	...	...	...	3	...	...	...	27		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
120	208	121	195	128	174	99	185	96	180	128	144	116	121	1861	2667	
328		316		302		284		226		272		237				4528

TABLE OF MORTALITY

Collated from Returns to the Board of

FOURTH QUARTER. Commencing

	Oct. 7.		Oct. 14.		Oct. 21.		Oct. 28.		Nov. 4.		Nov. 11.		Nov. 18.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Abscess	...	1	...	...	...	...	...	...	1	...	1	...	...	1
" abdominal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of brain	...	...	...	...	...	1	...	...	...	...	...	...	...	...
" kidneys	...	...	...	...	1	...	...	...	...	...	...	...	...	...
" liver	...	...	...	...	...	...	1	...	...	...	...	...	...	...
" lumbar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" neck	...	...	...	...	1	...	...	...	...	...	...	...	...	...
" parotid	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" psoas	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" stomach	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Albuminuria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia	...	...	...	...	...	...	...	1	1	...	...	...	...	...
Angina pectoris	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Aneurism of the aorta	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	2	...	2	...	3	...	2	...	4	...	2	...	1	...
Aphthæ	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Asphyxia	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Asthma	...	...	...	...	...	2	...	...	...	1	...	...	...	...
" thymic	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cachexia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer and scirrhus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the breast	...	...	...	...	...	...	2	...	...	...	...	...	...	...
" " pylorus	...	...	...	...	...	...	...	...	...	...	...	...	1	...
" " stomach and bowels	1	...	...	...	...	...	...	...	1	...	...	...	...	...
" " liver	...	...	...	...	...	...	...	...	1	...	...	...	...	...
" " rectum	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" " tongue	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" " uterus	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Cancrum oris	...	1	...	...	...	...	...	2	...	...	...	...	...	...
Caries	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Casualties	3	...	1	...	2	1	1	1	1	...	...	...	...	2
Burns and scalds	...	1	1	...	...	1	...	1	...	...	1	...	...	1
Concussion of the brain	...	...	...	...	...	...	...	...	...	1	1	...	...	...
Drowned	1	2	1	1	4	...	...	...	1	...	2	...	1	...
Injury of the chest	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poisoning	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Suicide	...	...	...	1	...	...	...	...	...	...	2	...	1	...
Violence	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Childbed	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	7	1	7	2	4	4	6	...	4	...	5	...	5	...
" infantum	...	12	...	8	...	5	...	2	...	8	...	1	...	2
" morbus	2	2	2	...	1	...	...	...	...	...	6	1	...	...
Chorea	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Colic	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Colica pictonum	...	...	...	...	...	...	...	...	...	...	...	...	...	...

FOR THE YEAR 1854.

Health. By W. S. W. RUSCHENBERGER, M. D.
September 30, 1854.

Nov. 25.		Dec. 2.		Dec. 9.		Dec. 16.		Dec. 23.		Dec. 30.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.					
...	1	...	...	2	...	...	1	1	...	...	...	5	4	9	4	1	6	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	3	...	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	..	...	1
...	...	...	...	1	...	...	...	...	...	...	...	2	...	2	1	3	1	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	..	3	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	6	9
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	2	6
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	3	2	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	2	...	2	...	5	1	...	...	5	1	80	2	82	39	18	22	111
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	1	...	...	...	1	...	3	3	...	9	10	22
...	...	...	1	1	...	1	...	1	...	...	...	3	4	7	8	6	8	29
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	1	6
1	...	...	...	1	...	...	...	...	...	1	...	3	...	3	8	6	5	22
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	1	1	4	8
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
1	...	1	...	...	...	...	...	...	...	...	...	4	...	4	4	4	10	22
1	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2	...	1	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	...	...	...	...	...	1	...	...	...	1	...	4	...	4	1	3	7	15
...	...	...	1	...	1	...	...	...	...	...	...	...	5	5	4	5	1	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	2	...	3
1	1	1	...	3	1	2	1	1	1	1	...	17	8	25	40	30	28	123
1	...	...	...	...	...	...	...	...	2	1	1	4	7	11	8	10	22	51
...	1	...	...	...	...	...	...	...	...	...	...	1	2	3	3	3	3	12
3	...	1	...	2	...	...	...	...	...	...	...	16	3	19	55	34	7	115
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	1	1	...	...	...	...	...	...	...	...	2	1	3	5	2	1	11
...	...	...	...	...	...	1	...	...	...	1	...	5	1	6	3	1	4	14
...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	2
1	...	1	...	...	...	...	...	...	...	...	...	2	...	2	2	3	1	8
2	1	3	1	1	...	1	...	...	1	...	...	45	10	55	515	21	...	591
...	...	...	...	...	...	...	1	...	...	...	1	...	30	30	621	81	1	733
1	...	...	1	2	...	...	...	1	...	...	...	15	4	19	96	11	1	127
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	1	...	2	...	2	1	4	3	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1

TABLE OF MORTALITY.—

	Oct. 7.		Oct. 14.		Oct. 21.		Oct. 28.		Nov. 4.		Nov. 11.		Nov. 18.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Coma	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Compression of the brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" spinal marrow	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congestion of the bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" brain	...	...	...	...	...	1	1	1	2	5	...	1	2	2
" liver	...	...	...	...	...	...	...	...	...	1	...	...	...	1
" lungs	2	1	...	...	...	...	...	2	...	2	...	...	...	...
Constipation	...	...	1	...	...	...	1	...	...	...	...	...	...	...
Consumption of the bowels	...	...	...	...	...	...	...	...	...	...	...	1	...	...
" lungs	21	6	31	8	21	8	26	8	23	8	16	3	24	4
Convulsions	1	13	...	11	...	7	...	11	...	15	2	7	2	11
" puerperal	...	...	2	...	...	...	...	...	...	...	1	...	...	...
Coryza	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cramp	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	...	1	...	...	...	7	...	8	...	12	...	7	...	2
Coup de soleil	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cyanosis	...	1	...	...	...	...	...	...	...	2	...	1	...	1
Debility	2	5	4	7	1	3	3	4	6	3	3	4	4	3
Dementia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	...	2	1	...	8	...	1	...	4	2	2	...	...	...
Disease of the brain	1	2	...	1	1	...	...	...	...	...	...	...	...	1
" chest	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" heart	3	...	1	1	...	...	2	...	6	...	4	...	...	1
" hip	...	...	...	...	...	...	...	1	...	...	...	...	...	...
" kidneys	...	...	1	...	...	...	...	...	...	...	...	...	...	...
" liver	...	...	...	...	...	1	...	...	1	...	1	...	...	...
" lungs	1	...	...	...	1	...	...	1	1	...	...	1	...	...
" mouth	...	1	...	...	...	...	...	...	...	...	...	...	...	...
" ovaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" parotids	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" spine	...	...	1	...	...	...	...	...	1	...	...	2	...	...
" stomach and bowels	...	...	...	...	1	...	...	...	1	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" thyroid glands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dropsy	3	...	4	...	2	...	...	...	1	1	...	...	1	...
" abdominal	...	...	1	...	2	...	2	...	2	...	1	...	...	...
" of the brain	...	3	...	4	1	3	...	6	...	2	...	2	...	4
" chest	...	...	3	...	...	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	...	...	...	...	...	...	1	...	...	...
" ovaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" pleura	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	6	...	7	6	1	4	9	2	5	1	...	3	1	1
Dyspepsia	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Effusion	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" on the brain	...	1	...	2	...	1	1	...	...	1	...	...	...	2
" chest	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Emphysema	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Empyema	...	...	...	...	...	...	...	...	...	...	...	...	...	...

FOURTH QUARTER—*Continued.*

Nov. 25.		Dec. 2.		Dec. 9.		Dec. 16.		Dec. 23.		Dec. 30.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.					
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	1	2	...	2	...	2	1	3	2	8	9	23	82	95	35	45	207
...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	5	1	2	10
...	2	...	...	...	...	...	1	2	...	...	1	4	9	18	18	14	24	64
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	2	6
21	1	21	3	16	2	31	...	36	3	22	6	309	40	349	824	320	385	1378
2	4	...	6	...	6	...	8	1	6	2	14	10	119	129	229	191	178	727
...	...	...	...	...	...	...	...	1	...	...	...	4	...	4	2	3	4	13
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
...	8	...	5	...	...	...	7	...	8	...	8	...	73	73	28	70	88	259
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35	...	...	35
...	...	1	...	...	2	...	2	...	3	...	1	1	13	14	8	6	9	37
5	4	4	4	2	4	...	4	2	3	3	6	39	54	93	180	95	97	465
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
2	...	...	...	1	...	1	2	1	1	...	2	16	9	25	147	81	11	214
1	1	...	...	...	...	1	1	...	2	...	...	4	8	12	29	20	26	87
...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	4	3	9
1	1	2	...	3	1	3	...	2	...	4	...	31	4	35	26	38	42	141
...	...	...	...	...	...	...	...	...	...	...	2	...	3	3	1	...	...	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	6	3	12
...	...	1	...	1	1	1	...	1	...	2	...	8	2	10	6	...	10	26
2	...	...	1	...	...	...	1	...	...	1	...	5	3	8	15	9	10	42
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	...	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	1	...	...	...	...	...	...	1	...	...	3	3	6	2	5	...	13
1	...	...	1	...	...	...	...	...	...	...	...	3	1	4	4	4	2	14
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	4
1	...	5	...	3	...	1	2	2	1	4	...	27	4	31	29	24	31	115
1	1	2	...	...	1	2	...	1	...	1	...	15	2	17	15	12	15	59
...	3	...	3	...	...	...	2	...	7	...	3	1	42	43	98	77	75	293
...	...	...	...	...	...	...	...	...	...	2	...	5	...	5	8	10	9	32
...	...	...	...	...	...	...	...	1	...	...	...	2	...	2	7	2	2	13
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
3	...	2	1	2	...	4	...	...	1	...	...	40	19	59	320	41	22	442
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	2	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
...	...	...	1	...	...	...	...	...	1	...	...	1	9	10	39	20	24	93
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	5	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1

TABLE OF MORTALITY.—

	Oct. 7.		Oct. 14.		Oct. 21.		Oct. 28.		Nov. 4.		Nov. 11.		Nov. 18.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Enlargement of the cervical glands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	1	...	1	...	1	...	...	1	...	...	...	...	...
Fever	...	...	...	...	...	...	...	...	1	...	...	1	1	...
" adynamic	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" bilious	1	...	...	1	...	...	...	...	...	...	...	...	...	...
" " remittent	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" cerebral	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" congestive	...	...	...	...	1	...	...	...	...	...	...	...	...	...
" continued	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" hectic	...	...	...	...	...	...	1	...	...	...	...	...	...	...
" intermittent	1	...	1	...	...	...	...	...	...	...	...	...	...	...
" malignant	1	...	...	...	...	...	...	...	...	...	...	...	...	...
" nervous	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" puerperal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" remittent	1	1	2	...	2	...	4	...	1	...	...	1	...	1
" scarlet	...	...	...	1	...	...	...	2	...	...	...	...	...	...
" typhoid	3	...	5	1	1	...	1	...	4	3	4	1	6	2
" typhus	7	...	...	...	2	...	2	...	...	...	...	...	...	...
" yellow	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fracture	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the arm	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" leg	1	...	...	...	...	...	...	...	...	...	1	...	...	...
" skull	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fungus hæmatodes	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gangrene	...	1	...	...	...	1	...	...	2	...	...	...	...	...
" of the lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gout	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hemorrhage	1	...	...	1	...	...	...	...	...	...	...	...	...	1
" from the lungs	...	...	...	1	1	...	1	...	...	1	1	...	...	...
" stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Hernia	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hypochondriasis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hysteria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Icterus	...	...	2	...	...	...	1	...	...	...	...	...	...	1
Ileus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Inanition	1	2	...	2	...	...	...	1	1	2	...	5	...	5
Inflammation	...	...	...	...	...	...	...	...	...	...	...	1	...	...
" of the bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" brain	...	3	2	1	1	5	4	1	1	2	1	3	...	5
" breast	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" bronchi	2	1	2	4	1	1	2	...	1	4	...	...	1	1
" chest	...	...	...	...	...	...	...	1	...	...	...	...	...	...
" fauces	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" heart	1	...	...	...	...	...	...	...	...	...	...	...	...	...
" kidneys	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" larynx	...	...	...	...	...	...	...	1	...	...	...	...	...	...
" liver	1	...	1	...	...	...	...	...	...	...	1	...	1	...
" lungs	2	5	2	5	6	3	...	...	4	4	3	2	4	3

FOURTH QUARTER—*Continued.*

Nov. 25.		Dec. 2.		Dec. 9.		Dec. 16.		Dec. 23.		Dec. 30.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.					
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	...	...	...	...	2	...	3	...	3	4	5	9	21
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	...	...	...	..	...	...	...	...	1	1	6	4	6	17
1	...	1	...	...	...	...	...	2	...	...	2	5	5	10	16	21	20	67
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	8	5	...	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	1	...	...	1	...	...	...	...	2	2	4	14	2	2	22
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	6	2	...	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	3	...	5
...	...	...	...	...	...	...	...	...	1	...	...	2	1	3	4	...	1	8
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	2	5
1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	6	8	10	25
1	...	...	...	1	...	...	...	...	1	...	...	12	4	16	13	18	3	45
...	...	...	...	...	1	...	...	...	1	...	...	...	5	5	9	40	107	161
1	2	6	2	3	1	1	2	2	1	5	1	42	16	58	49	40	35	182
1	...	4	...	...	...	...	...	...	...	...	1	16	1	17	24	28	17	81
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	...	...	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	3
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2	2	...	6
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	2	2	1	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	4
1	1	...	...	...	...	...	...	...	...	...	...	3	3	6	2	5	6	19
1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	...	3
1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	2
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	4	7	8	17
...	...	...	...	...	...	...	...	1	1	...	...	4	3	7	3	7	9	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	1	5
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	6	2	7	16
...	...	1	...	...	...	...	...	...	...	...	...	1	1	2	3	4	6	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	1	1	...	...	...	...	...	...	1	1	5	3	8	9	4	8	29
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	2	...	1	...	...	...	2	...	1	...	...	2	23	25	20	16	17	78
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	4	1	2	8
...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1	1	3	6
...	1	...	5	...	3	...	2	1	5	1	3	11	39	50	125	96	90	361
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	3	2	2	2	3	...	4	...	2	3	9	18	34	52	24	72	96	244
...	...	...	...	...	...	...	...	...	1	...	...	...	2	2	...	3	2	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	3	3	1	8
...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	3	4
...	...	...	...	...	1	...	...	...	1	...	...	...	3	3	5	...	8	16
...	...	3	...	...	...	...	...	...	...	...	...	7	...	7	5	10	10	32
3	4	6	6	...	...	1	4	5	5	7	7	43	48	91	64	118	162	435

TABLE OF MORTALITY.—

	Oct. 7.		Oct. 14.		Oct. 21.		Oct. 28.		Nov. 4.		Nov. 11.		Nov. 18.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Inflammation of the parotids	...	...	...	...	...	...	1	...	...	...	...	...	...	...
" peritoneum	1	...	1	...	1	...	2	1	...	...	1	...	...	...
" pleura	...	...	...	...	...	...	1	...	...	...	1	...	...	...
" spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	1	1	2	8	1	...	...	1	...	1	...	1	...
" tonsils	...	...	...	...	...	1	...	...	...	...	...	...	...	...
" throat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Insanity	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Intemperance	1	...	3	...	1	...	...	...	3	...	2	...	...	...
Intussusception	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Irritation of brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leprosy	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malformation	...	...	...	2	...	...	...	...	...	...	...	1	...	...
" of the heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mania	1	...	...	...	...	...	...	...	1	...	...	...	...	...
Mania à potu	8	...	1	...	2	...	...	...	...	...	1	...	...	...
Mania, puerperal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marasmus	2	13	...	8	1	7	...	6	...	5	1	6	...	1
Measles	...	...	...	1	...	...	...	1	...	...	...	1	...	...
Melæna	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Menorrhagia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Necrosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Neuralgia	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Obesity	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Obstruction of the bowels	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Old age	4	...	4	...	1	...	5	...	4	...	2	...	2	...
Onanism	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ossification of the arteries	...	...	1	...	...	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Palsy	2	...	1	...	1	...	1	...	2	...	2	...	8	...
Perforation of stomach and bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phlebitis	2	1	...	...	...	...	...	...	...	...	...	...	...	...
Phlegmasia dolens	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purpura	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Rupture of the heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scorbutus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scrofula	...	1	...	...	...	1	...	...	...	1	...	2	...	...
Smallpox	...	...	...	...	...	...	...	...	1	8	...	...	...	1
Softening of the brain	...	...	...	...	...	...	...	...	1	...	1	...	1	...
" heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" stomach	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spina bifida	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spinal meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Still-born	...	10	...	8	...	12	...	11	...	7	...	8	...	10
Stone	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Strangulation	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation	...	...	...	...	...	...	...	...	...	...	...	...	...	...

FOURTH QUARTER—*Continued.*

Nov. 25.		Dec. 2.		Dec. 9.		Dec. 16.		Dec. 23.		Dec. 30.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.					
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	1	1	1	...	...	...	...	1	...	...	...	8	8	11	14	11	16	52
...	...	...	...	...	...	...	...	...	...	2	...	4	...	4	2	7	8	21
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	1	4	5	4	6	8	2	...	3	...	...	19	21	40	57	32	44	173
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	2
1	...	...	...	...	...	...	...	...	...	...	1	1	1	2	...	1	4	7
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	2	8	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
3	...	...	...	...	...	8	...	...	...	...	...	16	...	16	30	15	7	68
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	4	4	6	8	5	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	4	7
...	...	...	...	1	...	...	...	1	...	...	...	4	...	4	6	3	1	14
1	...	1	...	1	...	1	...	3	...	...	...	19	...	19	19	11	7	56
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
...	5	1	7	...	3	...	3	...	3	...	...	5	67	72	218	85	72	447
...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	7	26	21	57
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	2	...	2	1	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	1	...	...	1	...	...	...	2	1	3	5	1	1	10
2	...	4	...	4	...	8	...	5	...	...	...	40	...	40	61	44	46	191
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	2
1	...	1	...	...	...	8	...	...	...	...	...	17	...	17	32	28	20	92
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	2	...	1	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	7	2	10
1	...	...	...	...	...	...	...	...	...	...	...	3	...	3	6	4	8	21
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1	4
...	...	...	...	...	1	...	...	...	...	...	1	...	7	7	10	7	22	46
1	...	...	2	...	...	...	...	...	2	2	...	4	8	12	4	16	8	40
...	...	...	...	...	...	...	...	...	...	...	1	3	1	4	6	3	6	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	10	...	11	...	9	...	7	...	12	...	18	...	128	128	132	127	147	534
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	2	...	...	...	1	...	...	...	...	...	...	...	3	3	5	...	7	15

TABLE OF MORTALITY.—

	Oct. 7.		Oct. 14.		Oct. 21.		Oct. 28.		Nov. 4.		Nov. 11.		Nov. 18.	
	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.
Syphilis	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Tabes mesenterica	1	1	...	...	...	1	...	...	...	1	...	...	...	1
Teething	...	...	...	...	...	1	...	...	...	1	...	...	...	...
Tetanus	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Trismus	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Tuberculosis	...	...	1	...	...	...	...	...	...	...	...	...	1	...
Tumor	1	...	...	...	...	...	...	...	...	...	...	...	...	...
" abdominal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" ovarian	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" uterine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tympanitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulceration	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of the face	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" larynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" neck	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" rectum	1	...	...	...	...	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	...	...	1	...	...	...	...	...	...	...	1	...	1
" throat	...	1	1	...	...	...	...	...	...	1	...	...	...	...
" uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unknown	1	4	2	2	1	3	3	1	2	1	3	2	4	4
Varioloid	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping-cough	...	2	...	5	...	2	...	1	...	3	...	3	...	5
Worms	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Wounds, gunshot	...	...	...	...	...	...	...	...	...	...	...	...	...	...
From the almshouse	21		22		19		24		17		20		14	
From the country	1		1		1		1		1		3		...	
People of color	19		18		11		11		11		5		7	
Under 1 year	...	55	...	59	...	35	...	40	...	46	...	41	...	51
From 1 to 2 years	...	21	...	12	...	16	...	10	...	18	...	9	...	11
" 2 " 5 "	...	15	...	19	...	17	...	19	...	17	...	13	...	12
" 5 " 10 "	...	8	...	4	...	11	...	1	...	4	...	3	...	3
" 10 " 15 "	...	2	...	2	...	3	...	2	...	3	...	1	...	3
" 15 " 20 "	...	4	...	9	...	3	...	3	...	7	...	7	...	5
" 20 " 30 "	28	...	27	...	23	...	28	...	21	...	12	...	10	...
" 30 " 40 "	24	...	23	...	17	...	17	...	17	...	18	...	18	...
" 40 " 50 "	17	...	17	...	13	...	13	...	22	...	13	...	13	...
" 50 " 60 "	18	...	18	...	7	...	16	...	15	...	12	...	11	...
" 60 " 70 "	10	...	13	...	7	...	6	...	8	...	11	...	8	...
" 70 " 80 "	4	...	6	...	10	...	7	...	11	...	5	...	4	...
" 80 " 90 "	3	...	4	...	2	...	...	...	5	...	5	...	4	...
" 90 " 100 "	1	...	3	...	...	...	2	...	1	...	1	...	1	...
100 and upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	105	105	111	105	79	85	89	75	100	95	77	74	69	85
Weekly mortality	210		216		164		164		195		251		154	

FOURTH QUARTER—*Continued.*

Nov. 25.		Dec. 2.		Dec. 9.		Dec. 16.		Dec. 23.		Dec. 30.		Total for the quarter.		Total fourth quarter.	Total third quarter.	Total second quarter.	Total first quarter.	Total for the year.
Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.	Adults.	Minors.					
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	2	...	...	4
...	...	1	...	...	...	...	...	...	...	...	...	2	4	6	19	2	8	35
...	1	...	...	...	1	...	...	...	...	...	...	...	4	4	18	4	4	30
...	1	...	...	...	...	...	...	1	...	...	1	1	4	5	3	3	4	15
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	2	...	5
1	...	...	2	...	1	...	...	...	...	...	...	3	3	6	7	10	1	24
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	2	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1
...	1	...	...	...	...	...	...	1	...	...	...	1	4	5	5	6	4	20
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	4	...	3	10
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	1
1	2	...	2	1	1	5	4	2	3	5	7	30	36	66	125	65	63	319
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	2	...	...	...	2	...	8	...	...	...	28	28	51	45	31	155
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
16		10		11		19		19		14				226	393	257	159	1035
...		...		...		1		2		1				12	25	10	16	63
7		12		10		8		13		13				140	248	167	163	718
...	37	...	35	...	36	...	37	...	43	...	53	...	568	568	1310	717	729	3324
...	8	...	9	...	5	...	9	...	17	...	11	...	156	156	698	268	265	1387
...	9	...	19	...	10	...	17	...	16	...	19	...	202	202	340	282	331	1155
...	4	...	6	...	4	...	6	...	7	...	7	...	68	68	142	123	117	450
...	6	...	6	...	3	...	1	...	4	...	6	...	42	42	78	39	33	192
...	8	...	7	...	6	...	...	...	8	...	8	...	65	65	99	81	65	310
														1101	2667	1510	1540	6818
17	...	23	...	15	...	21	...	22	...	21	...	263	...	263	453	240	233	1189
18	...	19	...	11	...	18	...	19	...	20	...	259	...	259	414	210	204	1087
17	...	14	...	11	...	11	...	10	...	14	...	185	...	185	341	168	174	868
7	...	12	...	11	...	12	...	8	...	16	...	158	...	158	285	110	140	643
10	...	7	...	9	...	7	...	9	...	8	...	103	...	103	188	108	128	527
6	...	10	...	3	...	7	...	10	...	10	...	93	...	93	135	87	101	416
5	...	1	...	3	...	3	...	2	...	1	...	38	...	38	68	40	50	196
...	...	1	...	...	...	...	...	3	...	...	...	13	...	13	27	12	11	63
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	5	8
80	67	87	82	63	64	79	70	83	90	90	104	1112	1101	1112	1861	978	1046	4997
147		169		127		149		178		194				2213	4528	2488	2586	11815

Dr. WISTER read the following notes of a case of

DISEASE OF THE HEART, HYPERTROPHY WITH DILATATION OF THE LEFT VENTRICLE; OSSIFICATION OF THE AORTIC VALVES, WITH ANEURISM OF THE AORTA.

THE subject of the following notes was a gentleman, aged 53 years, of nervous temperament, and spare habit. He was cheerful, quick, and intelligent, sprightly in mind, and rapid in his movements. His general health was remarkably good; he was constant in application to business, and I do not recall an instance when illness interrupted his daily avocation. Unfortunately, in this case, the occupation had always been sedentary, and afforded nothing to counteract a gouty diathesis hereditary in his family. For several generations there had been the ordinary manifestations of gout, occurring in both the male and female branches, and without any strict regard to regimen, it had always existed as gout of the extremities.

The subject of this notice was strictly abstemious, and never suffered from acute gout, although constantly annoyed by vague pains and functional disturbances, having their origin in this diathesis. There were at times local symptoms, never of long duration, or amounting to any organic changes; these occurred in the larger joints, at the shoulders and knees in particular, where, after pain attending their motion for a few days, entire resolution followed. A son of the above-mentioned, whose habits of life have been freer, has had well-marked gout of the extremities, leaving him, after all the phenomena of acute gout, in good health, and free from the vague and undefined derangements of the parent.

Some six years since, medical aid was invoked for dyspepsia, the heart, up to that time, not having attracted attention. Then the impulse of the heart was louder and more decided than natural, with dulness over a somewhat extended surface, the uniform pulsation being from 80 to 85 in the minute, accompanied by a rough sound heard at the base. This sound was short and sharp, following the ventricular systole, and was remarkable for its sharp precision, its abrupt termination, and the absence of continuous vibration. There were none of the annoyances of disease of the heart felt by the patient; and after the temporary use of digitalis,

to which he proved very susceptible, the pulse fell to a natural standard, and with relief of the dyspeptic symptoms the case was dismissed.

From this period there was consciousness of palpitation of the heart, but no disturbance of the organ sufficiently grave to interfere with the duties or pleasures of life. Other manifestations of the gout were not wanting, such as occasional pain in the knee-joints and shoulders, at shorter intervals, and at times in the region of the heart. When pain was present at either of these points it ceased elsewhere.

Some two weeks previous to the death of this gentleman he called at my office, and stated that he suffered from dyspepsia, had much pain in the left shoulder and region of the heart, extending through the left side to the point of the scapula; not, however, increased by exercise. He was sallow and emaciated, his tongue furred; urine small in quantity, high-colored, and extremely offensive; bowels confined; appetite languid or entirely absent. His pulse, while seated, was uniformly 100 in the minute, regular, soft, and uninterrupted, resembling that of a healthy man after brisk exercise. There were no evidences of local congestion, sleep was quiet and unbroken, generally uninterrupted through the entire night; no difficulty of breathing existed, either occurring in spasms or produced by exercise. The patient assured me that he was as able as ever to ascend heights, mount stairs, and use active exertion. The character of the pain was one of the chief subjects of complaint, sharp and violent spasms occurring unannounced, particularly in the left shoulder and side.

Again he presented himself on the third day preceding his death, and informed me that his appetite had returned, his urine was more copious, and his bowels regular; that he had become accustomed to the condition of the heart, and even thought its action diminished. The constant pain in the region of the heart (probably dyspeptic) was now relieved; and he assured me, distinctly, that were it not for acute pain occurring at intervals he should consider himself a well man.

Auscultation.—Resonance dull over an extended region towards the left side. *Impulse* very frequent and loud, resembling a continuous swell rather than an impulse, the heart appearing to remain in contact with the chest and roll from right to left.

Sounds. The first sound was obscured in the loud swell and extreme frequency of the heart, while the second sound was replaced by a rasping heard at the base of the heart and upwards in the track of the aorta. There was no thrill in the pulse at the wrist. The second, or that sound heard synchronous with the termination of the ventricular systole, was creaking and loud.

Death in this case was instantaneous and unannounced; it occurred after a full meal, followed by a glass of ice-water so cold as to excite remark. In passing into an adjoining room there was an exclamation betraying consciousness of some unusual sensation, and with this life was extinct.

Autopsy.—The heart as a whole was much enlarged, with a deposition of fat towards the base; no undue amount of serum within the pericardium, and no traces of inflammation upon this membrane. The walls of the left ventricle were thickened to the extent of nearly an inch, the muscular structure pale, soft, and readily torn by the fingers. This condition was shared by the auricle of the left side in a limited degree, enough to bring it within the law of custom. The cavity of the left ventricle was dilated one-half more than its natural capacity; the lining membrane healthy. This dilatation did not extend to the auricle, yet so exclusive had been the hypertrophy of the left heart that all proportion was destroyed, the right appearing as a mere epiphysis. The integrity of the valves throughout was perfect until the aortic were reached; these were distended, rigid, and covered nearly to their central margins with ossific deposits. At the margin of each valve there was a free edge of one line in width; with this exception the entire valve was inflexible, the blood passing through a narrow bony chink. The aortic sinuses were filled with ossific matter, and large masses were deposited around the aorta above the valves. Similar matter, but much less of it, was deposited below.

The aorta was dilated for three inches of its ascending portion to twice its natural size, without any appearance of inflammation. The coronary vessels were free from ossific matter, and no clot was found in the heart.

In reviewing this case there will be found many points of practical value. The pulse of hypertrophy with dilatation is in most cases strong, hard, and prolonged; here the muscular structure of the heart was softened, the entrance of the aorta contracted, and

many impediments thrown in the way of the circulation by abnormal deposits. The aorta was dilated, serving as an additional counterbalance; and these causes, without any regurgitation through the aortic valves, combined to produce a condition of the pulse from which no assistance could be drawn in diagnosis. The absence of local congestions, and effusion of serum, may be accounted for in the entire restriction of disease to the left side, and the constant balance of the organic changes. The ability for unusual exertion finds an explanation under the same head. It has been seen that, with hypertrophy almost restricted to the ventricle, the hypertrophy of the auricle being a minimum, seeming to exist from continuity of tissue alone, the impulse was much increased, thus disagreeing with the observations of Dr. Corrigan, who concludes, from an examination of many cases, that auricular hypertrophy is necessary to increased impulse. This importance conferred upon the auricles seems, indeed, misplaced; for, although necessary to the action of the heart, still their labor is but a connecting link in the vermicular muscular contraction, commenced at the entrance of the vessels, contracting the auricles, continued to the ventricles, and ending in their systole, the pulse and impulse of the heart. In some recent experiments, Valentin found that the auricles might be wounded, or even entirely destroyed, and the impulse of the heart continue, while the late Dr. Kiwisch (author of a truly philosophical work on obstetrics) felt the impulse of the heart distinctly, by applying the hand to the under side of the diaphragm in living animals. The natural conclusion is that a hollow vessel, in contracting, shortens its long and increases its transverse diameter; the heart, in fact, struggling at each contraction to transform itself from an ellipse into a spheroid, and in the act applying itself forcibly against the walls of the chest. This conclusion is more tenable than many explanations offered, and ranks Kiwisch among its supporters.

Much depends on the integrity of the muscular structure, and an increased impulse is not always present in hypertrophy. Andral mentions more than one case in which the ventricular walls were thickened, and their cavities enlarged without undue impulse; and also where there was hypertrophy without dilatation. There are instances of nervous palpitation attended by increased impulse ceasing with restoration of the nervous system, and true hypertrophy attended by occasional impulse at long intervals.

The place, as well as the method of deposit of ossific matter, is another subject of dispute. Tiedemann, Bertin, Bouillaud, and others, advocate the inflammatory theory, state that analogy is in its favor, that these deposits are found in company with the acknowledged products of inflammation, such as adventitious membranes; and, after inflammation, in serous and sero-fibrous tissues, the pleura, periosteum, capsules of joints, and those parts that perform the greatest amount of labor, and are therefore most liable to inflammation. Hope inclines to a general inflammatory theory, but excepts the ossification of advanced age, while Andral, also excepting the latter case, commits himself to no general opinion. On the opposite side is Laennec, and more recently Henle, who contends that these deposits are from the blood within the vessels. He states that they are found almost exclusively within vessels carrying arterial blood, a fact of striking import, showing, at least, a more decided tendency in the fibrin of the arterial blood to separate itself from the general current. This peculiarity of arterial blood receives additional support from the fact that, in congenital malformations of the heart, in which the communication between the right and left side continues open, the right heart receives with the arterial blood a liability to atheromatous deposits, and this occurs in veins also when any of them receive arterial blood, as in varicose aneurism.

In the present case, there were no traces of inflammation, either recent or past; the deposits, as usual, did not offer any microscopic elements of bone; they were masses of irregular globules with laminated structure; and, when treated with acids, the animal matter remaining had no trace of determinate texture. Through the kindness of Mr. Procter and Dr. Bridges, I am enabled to state that these deposits were phosphate of lime with ten per cent. of carbonate, no trace of lithic or uric acid.

In examining the works of Simon, it will be found that he gives in 100 parts of healthy bone—

Phosphate of lime and a little fluoride	59.63
Carbonate	7.33
Phosphate of magnesia	1.32
Salts	.69
Cartilage	29.70
Fat	1.33

In an analysis, by Marchand, of the bones in arthritis with numerous tophaceous deposits in the knee and elbow-joint, there was found—

Phosphate of lime	42.12
Carbonate "	8.24
Animal matter	46.32

The analysis of the bones in chronic gout made by Lehman, affords—

Phosphate of lime	35.16
Carbonate "	8.41
Phosphate of magnesia	1.31
Salts	2.93
Cartilage	38.14
Fat	12.11

Comparing the above results, it is seen that phosphate of lime is taken up from the bones in the proportion of 17.51 parts in arthritis, and 24.47 in chronic gout, there being nearly twice as much phosphate of lime in healthy bone as in that of an individual with chronic gout, while, on the contrary, the fat which is 1.33 in health has risen to 12.11, a gain of 11 parts.

We have here the source of the phosphate of lime, and see how the circulating fluid, charged with this excess, must always be in a condition to deposit it when inflammation or other obstacle is offered. The greatest masses in this case were deposited in the aortic sinuses behind the valves, where an eddy is caused in the circulating current, the most likely point for a suspended material to be thrown down. The strong probability that the internal and middle coats of an artery are nourished from the blood contained within the main artery, together with the fact revealed by the microscope, that the coats of a vessel are found uninjured under recent deposits, are circumstances not to be neglected in reviewing the above question. How small an interference will arrest the fibrin of the blood is well known, and when excess of earthy particles is present, that they should be deposited is a legitimate conclusion.

Gout in this case has been the ever active agent, having its origin in that hereditary mal-nutrition that altered the constitution

of the solids and vitiated the fluids. This effect upon the fluids, from the accessible nature of their abnormal deposits, has given rise to a humoral pathology, while the alteration of solid organic matter has been entirely disregarded, although the decided functional derangement of the nervous system might well have led to a question of its integrity. The burden of disease in the present case fell upon this system, and the functional derangements of the organs, accompanied by pain through life, together with instantaneous death, must be referred to nervous participation. That idiosyncrasy which loaded the circulation with phosphate of lime, and led to its deposition around the aortic valves, caused thereby hypertrophy with dilatation and distension of the aortic walls. The great organs followed in train as evident from their secretions, while the nervous system, with its peculiar phenomena, dyspepsia, wandering pain, and sudden spasm, was deeply implicated. How far the glass of ice-water taken on a full meal, and of which complaint was made, may have influenced the sudden termination of life by exciting spasm in a nervous system of morbid sensibility, must remain in doubt. But, taken into consideration with the recent discovery by Weber, that irritation applied to the par vagum of the pneumogastric nerve, or that portion of the brain from whence it is derived, will arrest the action of the heart, it may stand on record as at least a coincidence, that here the fibrilla of the pneumogastric were excited in the stomach, and this followed under peculiar conditions by spasm of the heart.

Dr. RAND made the following

REMARKS ON A CASE OF DIABETES WHICH RECOVERED UNDER TREATMENT BY BENZOIC ACID.

I AM indebted for the following account of this interesting case to Dr. Jonathan K. Uhler, of this city, and Dr. Wm. M. Uhler, of Falls of Schuylkill.

The subject of this case is about 51 years old, and, from her girlhood, has been subject to various diseases; a tedious attack of intermittent fever, followed by chronic derangement of the liver, and dyspeptic symptoms, such as pain in the stomach, nausea, with vomiting of a white, ropy, and acid fluid; bowels torpid,

but easily moved by light doses of cathartic medicine. Her nervous system has suffered greatly, with much occasional depression of spirits; has had at times much pain in the top of the head, and of an acute character in the stomach. Her temperament is naturally lively, is very fond of music, possesses much resolution and firmness of purpose. She has had eight children, the youngest of which is now more than fourteen years of age. Her father and uncle died of gout, and many of her symptoms have been referred to that predisposition. Her appetite is generally good. Such had been her condition for twenty-five years, when she, with several of her family, were attacked with typhoid fever, from which she recovered after many weeks of severe illness, during which she lost probably more than three pints of blood through the bowels, within two hours and a half, causing so great a prostration that reaction did not occur until the next day. After recovery from this attack, pain and uneasiness in the region of the liver, with enlargement of that organ, supervened. These symptoms were, after a time, removed. About eighteen months since she was attacked with bilious dysentery, from which she recovered fully after a short time.

In September, 1852, the first notice was taken of any change in the urine; the patient had partaken freely of peaches, watermelon, and grapes; diabetic symptoms followed. The urine was exceedingly saccharine, although the quantity discharged was not unusually large, but the calls to discharge the urine frequent. After these symptoms had continued some time, and various plans of treatment had been adopted without benefit, Dr. William M. Uhler suggested the use of benzoic acid, which was given in the form of tinct. benzoin comp.; this seemed to lessen the tendency to saccharine discharges, but about six or seven months after its adoption, the patient ate heartily of grapes, after which the urine again became freely saccharine. This was September 20, 1853. Dr. J. K. Uhler, under whose care the case was, tested the urine on that day; it was sweet to the taste—gave the reddish-brown precipitate with Trommer's test; the vessel containing it had, upon its drying, the sticky feeling of honey. The urine was of a very light color, fermented readily and spontaneously; upon drawing the cork of the bottle, violent effervescence occurred, the froth overflowing the bottle; the odor was peculiar, not at all re-

sembling that of healthy urine. On the 21st benzoic acid was administered, in pill, dose ten grains three times a day. On the 22d the urine was tested, and found to contain no glucose; its color and odor were natural, and no fermentation ensued; it had, in short, all the characteristics of healthy urine. From this time to the 9th of October, 1853, the urine remained healthy, and the patient free from uneasy sensations; at this date, however, she ate freely of cake. On the 10th, the urine was found again to contain sugar, though not in so great quantity as before; it disappeared upon the administration of benzoic acid. It returned on November 6th, after indulging the appetite; it was again checked by the benzoic acid, and continued so until December 3d, when it was renewed, with very marked symptoms, after the patient had eaten a quantity of Indian mush; benzoic acid again checked it. December 29th, the disease again returned after the patient had eaten freely of potatoes; in this instance benzoic acid was equally efficacious. It cannot be doubted, says Dr. Uhler, that in every instance the disease was brought about by the indulgence of the appetite for fruit and farinaceous diet; it is worthy, also, of remark, that while food, containing starch or glucose, was thus injurious to the patient, she could eat candy without experiencing any unpleasant effects.

The patient has remained free from any traces of the disease since February, 1854, now more than a year ago.

The disappearance of the sugar in the urine, in this case, so soon after the administration of the benzoic acid, and on five different occasions, would seem to establish a relation of cause and effect. How far this may be so can only be determined by further experience, and I may suggest that a failure of the medicine in another case, should not be considered as conclusive against it, as it is very probable that the existence of glucose in the urine may be symptomatic of several pathological conditions, differing in themselves.

In our present state of ignorance of the pathology of diabetes, and in view of the fact that we have but a single case of treatment by the agent under consideration, it may seem presumptuous to conjecture as to its *modus operandi*. Such conjecture, however, can at least do no harm. Dr. William M. Uhler, who suggested the use of the medicine, says in a note to me on the subject: "If

we are allowed the same latitude of reasoning assumed by Liebig and others, we may, by the addition of the formulæ of glucose and benzoic acid, together with oxygen, derive the formulæ for lactic acid and carbonic acid.

If to 1 atom of glucose	C_{12}	H_{14}	O_{14}	
we add 1 of benzoic acid	C_{14}	H_6	O_4	
and 6 of oxygen			O_6	
	C_{26}	H_{20}	O_{24}	
we obtain 4 equivalents, lactic acid . .	C_{24}	H_{20}	O_{20}	$= 4(C_6 H_5 O_5)$
and 2 carbonic acid	C_2		O_4	
	C_{26}	H_{20}	O_{24}	

"I here assume that the cure is effected by the benzoic acid converting glucose into lactic acid, which is broken up and respired, instead of passing off unchanged through the kidneys.

"Assuming that glucose has been changed into lactic acid, we may, by a further addition of formulæ, derive that of hippuric acid, a constant resultant of benzoic acid as changed by passing through the body. The atom of nitrogen contained in hippuric acid is probably derived from urea.

If to 1 equivalent urea . . .	C_2	N_2	H_4	O_2	
we add 1 of lactic acid . . .	C_6		H_5	O_5	
and 2 of benzoic acid	C_{28}		H_{10}	O_6	
	C_{36}	N_2	H_{19}	O_{13}	
we obtain 2 of hippuric acid . .	C_{36}	N_2	H_{18}	O_{12}	$=2(C_{18} N H_9 O_6)$
and 1 of water			H	O	
	C_{36}	N_2	H_{19}	O_{13}	

"I infer from the small quantity necessary to produce the good effects of benzoic acid, that it probably acts like theine—induces action.

Another formula may be given:—

2 of urea . .	C_4	N_4	H_8	O_4		C.	N.	H.	O.
1 of glucose .	C_{12}		H_{14}	O_{14}					
and 4 of benzoic acid	C_{56}		H_{20}	O_{12}					
	C_{72}	N_4	H_{42}	O_{30}	=4 hippuric acid . .	72	4	36	24
					and 6 water . .			6	6
						72	4	42	30"

This explanation of Dr. Uhler assumes the grape sugar to be the cause of the disease, and not an effect, and agrees with that

view of the pathology of the disease which makes the fault in the lungs, which do not consume the sugar formed in the liver.

I would suggest that—inasmuch as benzoic acid taken internally is always rejected in the urine, as hippuric acid, which is benzoic acid, plus glycocoll or sugar of gelatine—should the medicine prove to be a remedy, future investigation may perhaps enable us, by tracing a more direct relation between glycocoll and glucose than is at present known, to refer the *modus operandi* of the medicine to its union with glycocoll after ingestion.

Dr. MORRIS mentioned a case of incontinence of urine treated successfully with benzoic acid. In this case the urine was healthy, and there was no sign of structural disease of the bladder. Dr. M. prescribed the medicine in Syrup of Tolu, which, to some extent, disguised its disagreeable taste.

Dr. WOOD remarked upon the great derangement of function and distress which accompany, and are to some extent produced by, phosphatic urine. To destroy the alkaline properties of this fluid, mineral acids are insufficient, while benzoic acid speedily changes its reaction and renders it transparent, though it does not, of course, remove the cause of its alkalinity.

Dr. MORRIS alluded to the great benefit he continued to derive from inhalations of iodine vapors in the treatment of chronic pulmonary complaints, as originally recommended by Scudamore. Sometimes, instead of using a watery vehicle, he employed ether with signal advantage.

Dr. WISTER stated that the late Dr. Morton had always found such inhalations a most valuable palliative in bronchial affections, and particularly in cases of chronic cough attended with dryness of the posterior fauces.

Dr. JACKSON had also used this method a great deal, employing the vapors of turpentine, copaiba, chlorine, &c. in chronic bronchitis, and had generally found them to do good.

Stated Meeting, April 4, 1855.

Dr. MEIGS, Vice-President, in the chair.

Present, forty-two Fellows.

Dr. T. H. BACHE, Librarian, reported the following donations to the Library:—

From Drs. BIDDLE, F. G. SMITH, and WEST, various numbers of Medical Journals.

From Dr. LAJUS: Stahl, *Theoria Medicæ Veræ;* Harvey, *Exercitationes de Generatione Animalium;* Blake, on *Delirium Tremens;* Tissot, *La Santé de Gens de Lettres, &c.;* in all, twenty-five volumes.

From Dr. MORETON STILLE: *Ephemerides Naturæ Curiosorum,* and *Acta Physico-Medica Academiæ Cæsareæ;* sixty-one volumes, 4to.

From Dr. THOMAS F. BETTON: *Encyclopædia Britannica;* twenty volumes, 4to.

From Drs. EDWARD and HENRY HARTSHORNE: *Transactions of the American Philosophical Society;* ten volumes, 4to.

The Secretary presented Vol. VII. of the *Transactions of the American Medical Association,* from the Committee of Publication of that body.

Dr. COATES presented a copy of his *Biographical Sketch* of the late C. CALDWELL, M. D.

CAN IODINE REVIVE MERCURY LATENT IN THE SYSTEM?

Dr. BACHE desired to call the attention of the College to the question of the influence of iodide of potassium upon workmen in mercury and lead, and upon persons who have taken medicinal preparations of those metals. It is asserted, said Dr. B., that in such cases, the urine is found to contain a compound of the metal with which the system has been more or less impregnated, and that hence, when such metallic preparations have been for a long time taken, iodine must be cautiously administered. In

the case of mercury, for instance, iodine is said to develop mercurial salivation with great facility. The iodine is supposed to unite with the metal deposited in the tissues, to render it soluble, and consequently to renew its activity. The facts of the case must be admitted, and the theory is plausible. It must, therefore, be presumed that when the system is thus saturated with either of the metals mentioned, but mercury in particular, the iodide of potassium ought to be very cautiously administered. In like manner, when common salt is given to persons who have taken the milder preparations of mercury, a bichloride will be formed with whatever of the metal remains in the tissues, and may produce salivation.

Dr. JACKSON referred to a case which he had already mentioned to the College, and which helps to illustrate the subject under discussion. A lady, who had been taking blue pill, removed to the country, where she began to use the iodide of potassium in doses of five grains, three times a day. After taking three or four doses, she was salivated, and the medicine was suspended. When the symptoms had declined, it was resumed, and again produced the same effect.

Dr. BELL called attention to a class of cases in which the mercurial action was developed by the operation of physiological causes alone, such as cold, fatigue, &c. He had sometimes been struck with the rapid cure of syphilis where iodine was administered after mercury, and that not where full doses, such as five grains, but small and even minute quantities, were given. Yet, it was not necessary here to invoke the operation of a chemical law; the physiological operation of the iodide appeared to him sufficient to account for the results.

Dr. PAGE had repeatedly seen tenderness of the gums and even salivation produced by this salt, and in many of such cases no mercury had been taken, except, perhaps, in the way of a purge, but none, certainly, to impress the constitution. He doubted the proposed explanation of the ptyalism which sometimes follows the administration of the iodide of potassium. This ptyalism differs from the mercurial, and notably in the circumstance of

its being unaccompanied with the so-called "mercurial fetor." Besides, nitric acid will produce salivation, and perhaps other agents still. He regarded the chemical hypothesis in the case as altogether gratuitous. If lead or mercury is retained in the tissues, it must either be quiescent, or, on the administration of the iodide, be dissolved and excreted with the urine. In the one case, it is innocuous, and in the other, it passes out of the system. He believed the iodide of potassium to possess an independent and powerful physiological action, whereby it restores a healthy activity to the impaired functions.

Dr. EVANS had never been able to believe that iodide of potassium developed the constitutional action of mercury. On the contrary, he knew that the salt in question was one of the best agents for checking ptyalism. Besides which, he felt sure that the iodide would of itself produce salivation. He referred to the case of a female who had never made use of any mercury, except as a cathartic; but who, on taking the iodide of potassium, became affected with a copious secretion from the Schneiderian membrane, and then from the salivary glands.

Dr. CONDIE had repeatedly seen tenderness of the mouth and ptyalism produced by this salt, and that without the possible intervention of mercury, as none had previously been taken. Besides, salivation by the iodide is peculiar, it produces no fetor of the breath. Salivation may likewise be caused by nitric acid, accompanied by swelling of the gums and of the salivary glands.

Dr. JACKSON referred to the cases of Melsens, among which were some of paralysis cured, where the iodide of potassium developed salts of lead and mercury in the urine, although preparations of these minerals had not been taken for a long time before.

Dr. NEILL called attention to the fact that metallic mercury has been found in closed cavities of the body after death. He had himself met with one case, where a considerable amount of mercury was discovered within a bronchial gland. No history of the subject of this case was attainable.

Dr. JACKSON had also found metallic mercury in the brain of a man who had been accustomed to inhale the fumes of this mineral.

Dr. H. HARTSHORNE, passing to another subject, suggested that water, heated in copper boilers, might become poisonous. He had, in one family, observed symptoms which he could not account for, except upon this supposition.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM MAY 2, 1855, TO OCTOBER 3, 1855, INCLUSIVE.

Stated Meeting, May 2, 1855.

In consequence of the meeting of the American Medical Association, no quorum was present.

Stated Meeting, June 6, 1855.

Present, thirty Fellows.

The Librarian, Dr. T. H. Bache, announced the receipt of the following donations to the Library.

From Drs. Lajus, A. Stille, S. Lewis, Hollingsworth, Condie, Carson, and Neill, various numbers and parts of sets of Medical Journals.

From Dr. A. Stille, Andral, *Cours de Pathologie.*

From Dr. S. Lewis, *What to observe at the Bedside and after Death in Medical Cases.* Cheyne, *Hydrocephalus Acutus, Parliamentary Reports.* 1. *Inquiry into Drunkenness.* 2. *Medical Education,* 2 Parts. 3. *Health of Towns.* 4. *Statistical Reports on the Sickness, Mortality, and Invaliding, among her Majesty's Troops in Ceylon, the Tenasserim Provinces, and the Burmese Empire,* 5 vols. fol. Fuller, *Medecina Gymnastica.*

Dr. PENROSE read the following case of

CEPHALIC VERSION IN THE SHOULDER PRESENTATION WITH THE ARM IN THE VAGINA.

The case to which I wish to call the attention of the College, is interesting, as having been one of difficult labor, in which an unusual method of delivery was attempted and entirely succeeded. The case to which I refer was one of shoulder presentation, and the treatment consisted in bringing the *head* of the child to the superior strait, instead of, as is almost universally recommended, making version by the feet.

My attention had been called to this plan of treatment for similar cases by a pamphlet of Dr. Wright, of Cincinnati, in which he advocates the resort to version by the head in all cases where the shoulder presents, even though the arm of the child be in the vagina.

It is not necessary that I should occupy the time of the college in referring to the opinions of authors on this subject, as they are, doubtless, well known to all present; the almost universal direction in these cases being, particularly when the arm is in the vagina, to resort to version by the *feet*.

The following is a history of the case which I take from my notes:—

On the evening of the 3d of April I was called, by a midwife, to see Mrs. M——, as a case of difficult labor which she could not manage. On reaching the patient, I learned that she had been taken in labor some time in the morning; that at two o'clock she had given birth to a child, and that the midwife, on making an examination, discovered a second child, presenting by the shoulder, its arm being in the vagina. This was at two o'clock in the afternoon. I did not see the patient until about seven o'clock, five hours after the rupture of the membranes. I then found her with the uterus contracted spasmodically upon the child, suffering a great deal of pain in consequence, whilst her condition had not been at all improved by brandy freely given by the midwife.

On making an examination, I found the arm in the vagina, considerably swollen, the shoulder at the superior strait, the head high up in the right iliac fossa, being readily felt through the

abdominal walls, the back of the child towards the symphysis pubis. Having carefully diagnosed the position of the child, I determined to resort to version by the *feet*, but met with so much difficulty from the firm contraction of the uterus, together with the great irritability and restlessness of the patient, who rolled and struggled so violently when I attempted the operation, partly, no doubt, from the effects of the brandy she had taken, that I was forced to desist. I then determined to try the plan of treatment as suggested by Dr. Wright, which consisted, as the first step, in carefully returning the arm into the cavity of the uterus, which was not very difficult, and then, with two fingers on the shoulder I endeavored, not so much to push it up, as to slide it away from the superior strait, attempting, in fact, to imitate spontaneous version, by causing the whole body of the child to revolve in the cavity of the uterus; this action upon the shoulder was very much facilitated by an external manipulation, through the abdominal walls, upon the head in the iliac fossa, which consisted in attempting to force it toward the superior strait. To my surprise, the shoulder readily yielded and ascended; the next minute, still continuing the process, the neck, and shortly after the side of the head, were felt at the superior strait, and then, by a little more manipulation, the vertex was brought down in the left occipito-anterior position. The moment the head was placed in the proper position, the patient expressed herself completely relieved from the severe pain she had been suffering for hours.

For a time, the uterus ceased entirely to act, but pains coming on, they were stimulated by ergot, the parts having been dilated by the passage of the first child, and, in about an hour after, the child was born ALIVE.

It is proper, however, to state, as explaining, to a certain extent, the facility with which the operation was performed, that the child weighed only five pounds, yet on the other hand it should be recollected that the smallness and mobility of the child are, perhaps, the most common cause of shoulder presentations, and hence, in such presentations, we may expect, very generally, to have small children to deal with, and, moreover, that version by the *feet* had been attempted, and had not been accomplished.

It might be urged that, as the child was not large, the case might have been left to nature, and labor terminated by sponta-

neous evolution. But what are the facts of the case? Five hours had elapsed since the rupture of the membranes, and one of the earliest changes noticed when spontaneous evolution takes place had not yet occurred; I refer to the rotation of the presenting shoulder to the symphysis pubis, as preparatory to its engagement beneath the arch; indeed, the spontaneous expulsion of the child in these cases is the exception, not the rule; and when it does happen, if we think for a moment on the mechanism of labor by which delivery is accomplished, we cannot fail to perceive that the mother must be exposed to all the dangers attending a long and painful labor, while the child is so powerfully compressed that death is the general result. Velpeau gives statistics of one hundred and thirty seven cases of spontaneous evolution, in which but twelve children were born alive.

It is asserted by some that an error of diagnosis has existed in those cases where it is stated that version by the vertex has been successfully performed in shoulder presentations; that they have been really cases of head presentation, complicated by a descent of the arm. But this certainly was not so in the case to which I refer, the head being distinctly felt in the right iliac fossa, through the abdominal walls, whilst the partial introduction of the hand into the cavity of the uterus, in the attempt to make version by the feet, enabled me perfectly to recognize the position of the child.

Again, it is said that the operation of version by the vertex is a very difficult one, that we cannot, without subjecting the mother to very great danger, push up the presenting part of the child, and search for the head; and then, having found it, that we cannot grasp the round and slippery occiput and bring it to the superior strait. This objection in many cases may be well founded, but the operation which I have related consisted, rather, in pushing the shoulder away from the superior strait, causing, thereby, the child to revolve in the cavity of the uterus; of course as soon as such a motion of rotation is communicated to it, by pushing away the shoulder, we must, of necessity, have some other part brought to the superior strait, which part will be first the neck, then the head, and by a little manipulation the occiput can be brought down, and an *impracticable* case of labor can be thus changed, without, or with comparatively little, pain to the patient,

and in a few minutes, to one of the most simple character; and not only thus changed, but effected without exposing the child to the great risks to which it is always liable when version by the feet is resorted to; and, if an attempt to make version by the vertex should fail, without giving our patient any more pain, our hand being in the vagina, our fingers in the mouth of the uterus, we can most easily, if the case admit of it, pass our hand upwards, grasp the feet, and bring them down.

On motion of Dr. BIDDLE, permission was given to Dr. Penrose to publish his report in the *Medical Examiner*.

Dr. NEILL exhibited an improved apparatus for the treatment of fractured leg, and made the following remarks upon its advantages.

A NEW APPARATUS FOR FRACTURES OF THE LEG, REQUIRING EXTENSION AND COUNTER-EXTENSION.

Comparatively few cases of fracture of the leg require the employment of any apparatus by which extension and counter-extension are effected. Simple means generally are sufficient in ordinary cases.

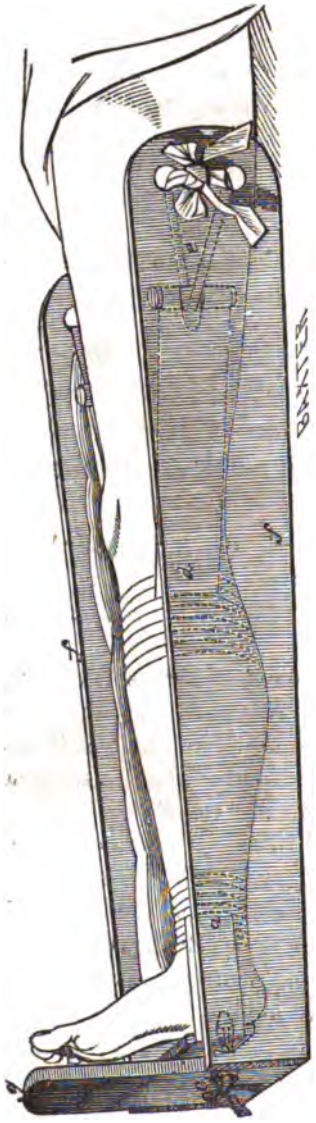
There are, however, some cases of simple fracture involving both bones, where the violence has been great, and where the line of fracture is very oblique, or near the ankle, in which it is impossible to maintain the fragments in accurate adaptation without resort to some means of effecting permanent extension.

To accomplish this end, various mechanical expedients are employed with results equally variable. The double inclined plane and its various modifications, Hutchinson's splints, the ordinary fracture-box, with the addition of the long splint of Desault for fracture of the thigh, together with many numerous patented machines, are the contrivances generally used.

I need only appeal to the experience of those under whose care many such cases occur, to the numerous deformities in every extensive cabinet, and to the great ingenuity which has been displayed in this department of mechanical surgery, to establish the truth that there is a desideratum in the treatment of this fracture.

In endeavoring to supply this deficiency, I have resorted to a

Fig. 1.



contrivance which I think is simple and effective, and which I believe to be novel, not only in its details, but in its principle.

For simple fractures of both bones of the leg, attended with shortening and deformity not easily overcome, the limb should be placed on a long fracture-box, with sides extending as high as the middle of the thigh, and a pillow should be used for compresses.

The counter-extension is made by strips of adhesive plaster one and a half inches in breadth, secured on each side of the leg below the knee and above the seat of fracture, by narrower strips of plaster applied circularly. The end of the counter-extending strips may then be secured to holes in the upper end of the sides of the fracture-box, by which the *line of the counter-extension is rendered nearly parallel with the limb.*

The extension is also to be made by adhesive strips in a mode which is now well known and understood. The ends of the extending bands may be fastened to the foot-board of the box.

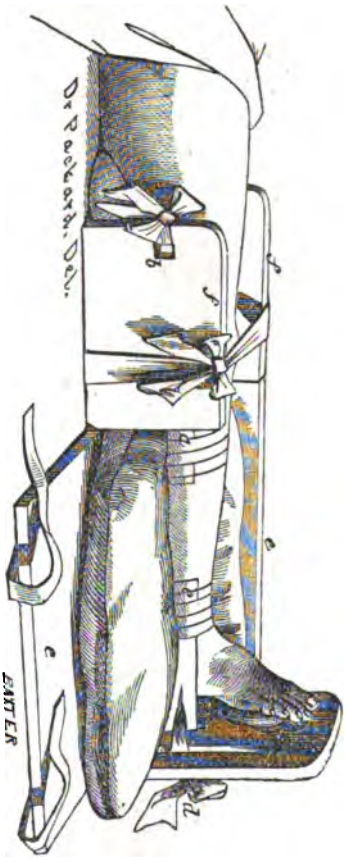
In compound fractures of the leg, shortening and deformity are often difficult to overcome, as is well

Fig. 1.—*f f.* The sides of the fracture-box. *g.* The foot-board. *d.* Counter-extending strip of adhesive plaster. *e.* Loop of bandage securing the counter-extending band to the holes in the upper end of the box. *a.* Extending band of adhesive plaster. *b.* A small block wider than the foot to prevent pressure on the malleoli. *c.* Loop of bandage tied to the foot-board maintaining the extension.

known to experienced surgeons. In such cases we may wish to dress the wounded soft parts, and at the same time maintain a certain amount of extension and counter-extension.

This can be readily accomplished by having the sides of the fracture-box sawed in two parts at the knee, so that the sides of the box above the knee, from the upper ends of which the counter-extension is made, need not be disturbed during the dressing, while that portion of the side of the box corresponding to the leg may be opened at pleasure, without diminishing the tension of the extending or counter-extending bands.

Fig. 2.

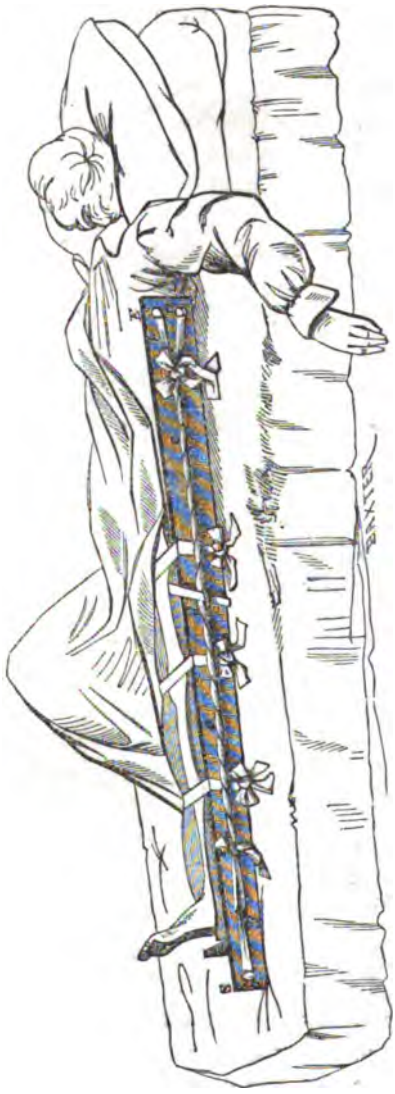


In connection with the above apparatus, I may take this opportunity to suggest a new and easy mode of gradually increasing the tension force in machines which may be applied either to fractures of the thigh or to the leg.

The object is often obtained by simply tying the ends of the extending and counter-extending bands to the extremities of the splint, or where it is found difficult to maintain the desired degree of tension, by screws and ratchets of various forms applied to the ordinary splints. The improvement consists in making the extension and counter-extension in

Fig. 2.—*f f.* Sides of the fracture-box corresponding to the thigh. *e e.* Sides of the same corresponding to the leg. *a.* Counter-extending band of adhesive plaster secured below the knee. *b.* The same fastened to the upper end of the side of the box. *c.* The extending adhesive strip. *d.* The same secured to the foot-board.

Fig. 8.



a *continuous line*, and of a simple means of gradually and powerfully increasing the force.

To illustrate this application, take, for instance, a case of fracture of the thigh, in which a Physick's Desault has been applied in the usual way. Instead of securing the extremities of the counter-extending perineal band to the two holes in the upper end of the splint, and the extremities of the extending band to the hole in the lower end of the splint, let these bands be carried through their respective holes and *secured to each other* about the middle of the outer splint. Thus we make the extension increase the counter-extension, and the reverse.

At the same time, by *simply twisting these united bands by a small stick*, we can increase and maintain the power as effectually as by the most complicated apparatus.

In simplicity and in power, this arrangement of the bands resembles the Spanish wind-

Fig. 3.—E S. External splint of Physick's Desault. *b*. Counter-extending band. *a*. Holes in the upper end of the splint. *g*. Extending band. *c c*. An inelastic band or cord connecting the extending or counter-extending band. *d*. A stick by which *c c* is twisted.

lass or temporary tourniquet, made by a handkerchief and stick. Its operation is upon the same principle as Gilbert's Twisted Rope for Dislocation.

Dr. ASHMEAD remarked that he had, somewhere, seen an account of a fracture-box, which, like this, was intended to be opened by sections, but the modification now exhibited, appeared to him to be novel, and to possess certain advantages.

Dr. BIDDLE, referring to the recent discussion concerning the *modus operandi* of the iodide of potassium, in curing the effects of lead poisoning, said that, he had recently had a case under treatment, which, perhaps, would serve to illustrate the subject. The patient manifested the usual signs of saturnine poisoning, the blue line upon the gums, constipation, colic, pains in the muscles and joints, &c. Five grains of the iodide of potassium were prescribed three times a day, and, under the use of the medicine, a gradual and permanent amelioration took place. But no appearance of lead could be detected in the urine after carefully testing it by sulphuretted hydrogen.

The Secretary read a note from Dr. ALEXANDER WILCOCKS, tendering his resignation as a Fellow of the College. On motion, the resignation was accepted.

The Secretary also presented a communication from Dr. MEIGS, Vice-President of the College, declining to become a candidate for re-election on the expiration of his term of office, in July, on the ground that his occupations would, probably, require his absence from the city during the summer months.

The president appointed Dr. WILSON JEWELL, Committee on Meteorology and Epidemics, for the ensuing year.

Stated Meeting, July 2, 1855.

Dr. WOOD, President, in the chair.

Present, twenty-seven Fellows.

This being the annual meeting for the election of officers, a ballot was held, of which Drs. COATES and BRIDGES were appointed Tellers, and announced the result to be as follows:—

President.—GEORGE B. WOOD, M. D.
Vice-President.—FRANKLIN BACHE, M. D.
Censors.—J. WILSON MOORE, M. D., HENRY BOND, M. D., SAMUEL JACKSON, M. D., GEORGE W. NORRIS, M. D.
Secretary.—ALFRED STILLE, M. D.
Treasurer.—J. RODMAN PAUL, M. D.
Curator.—JOHN NEILL, M. D.

Dr. FRANCIS W. LEWIS was elected a Fellow.

The Censors reported that they had examined the accounts of the Treasurer, presented at the last meeting, and found them correct.

The Librarian, Dr. T. H. BACHE, reported verbally that the arrangement of the library and its catalogue were so nearly completed as to be ready for the use of the Fellows. He also announced the following donations received since the last meeting, from Dr. G. W. NORRIS.

Traité des Maladies du Coeur et des Gros Vaisseaux, by R. J. Bertin: 1 vol. 8vo. *Maladies de l'Utérus*, by H. Pauly: 1 vol. 8vo.

Thèse: *La Rougeole*, par J. Bondin. *Hydrocephale aigue*, par E. Rufz. *Colique de Plomb*, par A. Grisolle.

Clinique de Maladie Syphilitique, par M. N. Dévergie; 2 vols. 4to., bound in 1, with atlas. *Essay on the Venereal Disease*, by R. Carmichael; 1 vol. 4to.

Dr. F. BACHE related a case of

SPONTANEOUS DISLOCATION OF THE EYE

To which he was recently called, occurring in a child about a year old. The left eye was found protruded beyond the eyelids, which had passed behind the anterior half of the globe. By making gentle pressure for a short time upon the eye, it slipped into its place. The same eye had been previously twice dislocated, on which occasions the mother had succeeded in reducing it herself. In every instance in which the dislocation had occurred, it had been caused by violent crying. The child at birth exhibited so great a prominence of the eyes as to amount to a deformity; and the same condition still continued, but without interfering with perfect vision. The child also has a congenital deficiency of the hard palate. Dr. Bache gave it as his opinion, that there existed in this case a congenital defect of the bones of the orbit, which allowed the brain, during violent crying, to press into the posterior part of the orbit, with the effect of dislocating the eye.

Dr. COATES wished to know if any of the Fellows had ever seen a case of that injury to the eye known as "gouging," and what might be the condition of parts produced by it. But no one present appeared to have any knowledge of the subject.

Dr. GILBERT said: The case reported by Dr. BACHE reminds me of one resembling it in the circumstance of extrusion of the eye, which was brought to me, lately, at Hollidaysburg by Dr. Ross, of Williamsburg. The patient was a married lady of about 28 or 30 years of age. Three or four years ago, her left eye became prominent, and its sense of vision was lost about 18 months since. The eye grew still more prominent until it was quite thrust beyond the lids. The ball did not itself appear to be enlarged, but to be urged forward by a tumor behind it, which filled the orbit. As much pain was experienced, the sight destroyed, and the general aspect of the patient sallow and emaciated, it was judged proper to extirpate the organ with the adventitious mass filling the orbit. When removed, it was found that the tumor was encephaloid in its general features, and that it had caused wasting, and almost total disappearance of the muscles of

the eye. The tumor had not become adherent to the walls of the orbit, nor firmly to the posterior segment of the eye.

The heat of the weather caused so rapid a decomposition of the tumor that it had become broken down, after my return to the city, before it could be submitted to microscopical examination. More than a month has elapsed since the operation, and the patient is reported as doing very well.

Dr. WALLACE wished to call attention to the propriety of urging on the Board of Health immediate attention to the streets in the southern section of the city. In some places they were to the last degree offensive.

Stated Meeting, August 1, 1855.

Dr. CARSON in the chair.

Present, fifteen Fellows.

Dr. R. P. THOMAS exhibited a specimen of

RUPTURE OF THE LEFT VENTRICLE OF THE HEART,

FROM THE PATHOLOGICAL COLLECTION OF DR. S. P. BROWN.

Dr. THOMAS stated that the individual from whom this was taken was a female, about seventy years of age, of very large and stout habit.

Ten days previous to her decease, she called at the Northern Dispensary for the purpose of obtaining relief for some dyspeptic symptoms, but did not intimate that anything more serious was the matter. These symptoms were relieved by appropriate treatment. Upon the day prior to death, she called a second time, complaining of nausea, vomiting, and very great distress in the region of the heart, and over the left chest, with sharp pain in the left arm. The feeling of distress was so extreme that she declared her inability either to sit or lie down. The medical gentlemen present, Drs. A. M. Slocum and John Rhein, endeavored

to ascertain the condition of the heart and lungs, but there was so much confusion of sounds from the hurried respiration, the excited actions, and the moans of the patient, that no satisfactory diagnosis could be made out.

To relieve immediate suffering, a mixture, containing aromatic spirit of ammonia and Hoffmann's anodyne, was directed, together with an anodyne lotion for the chest and arm.

Of her history after leaving the Dispensary, nothing further is known than that, upon reaching home, she retired to bed and requested two young girls (occupants of the same house) to rub her freely with the lotion, which they continued to do, at intervals, until two o'clock at night, occasionally administering laudanum to lull the pain.

Believing her much relieved, they then retired to rest, but upon again entering the room, at five o'clock, she was found dead in the bed.

The *post-mortem* examination was made in the following evening by Dr. S. P. Brown, in the presence of Drs. Slocum and Rhein.

The removal of the sternum revealed a large mass of fat in the anterior mediastinum. The lungs appeared healthy throughout. There was no effusion in the cavities of the pleuræ. The pericardium contained between three and four ounces of blood intermingled with some serum. The heart exhibited a rupture of the left ventricle.

The Fellows of the College will observe (from the specimen here presented) that the heart is enlarged about one-fourth more than its normal condition, taking the size of the fist as the ordinary approximative measurement. This enlargement is not owing to an unusual development of any one part or cavity, but rather to an equable distension of all its cavities. The auricles are larger than usual, as are, also, the ventricles. A considerable deposit of fat is seen beneath the serous investment of the heart, particularly well developed at the roots of the great vessels, but extending, likewise, over the surfaces of both ventricles.

The pulmonary artery with its semilunar valves, the two auriculo-ventricular openings, and the tricuspid and mitral valves, present no abnormal deviations from a healthy standard.

Each of the semilunar valves of the aorta exhibits a cartilagi-

nous or semi-ossified deposit at its base, though not sufficiently extensive to interfere with the valvular action.

The tube of the aorta presents, in many places, a firm cartilaginous deposit between the serous and the fibro-muscular layers.

As previously stated, the cavities of the auricles are enlarged, but their walls have a proper thickness.

The walls of the right ventricle vary somewhat in thickness; thus, near the auricle they measure three lines, while at the apex the thickness does not exceed a line and a half. In fact, in one or two places, the internal and external serous layers appear to be in apposition.

But the points most worthy the attention of the Fellows are, the variable thickness of the walls of the left ventricle, and the condition of the anterior coronary artery.

For about two-thirds of the extent of these walls, namely, in the posterior and left side of the ventricle, they measure, uniformly, seven to eight lines in thickness. But in the right anterior part there is an oval spot, two inches long and one inch broad, in which the thickness does not, at any one point, exceed three lines, and in the centre of this spot where the rupture occurred, the fissured margins measure only a line to a line and a half.

The fissure is one inch and a quarter long, commencing near the apex of the left ventricle (upon its anterior surface) just at the septum ventriculorum, and running obliquely upward, or toward the base and left side.

The margins of the fissure are ragged and irregular, retaining a large quantity of fibrin.

Immediately to the left of the fissure described, and communicating with it internally, is a smaller one that will admit a goose-quill.

A careful examination of the internal surface of the left ventricle does not detect the presence or pre-existence of an inflamed or ulcerated state of the endocardium. A shining serous layer is observable in the immediate vicinity of the ragged margins of the fissure.

The right, or posterior coronary artery, is nearly devoid of ossific deposits, as is also the left branch of the left or anterior coronary artery. But the right branch of the latter, namely, that

which passes along the septum of the ventricles, is filled with such deposits. In places, the deposit is limited; in others, it is more extensive, involving one-third or one-half of the circumference of the tube; and in a third, a complete bony ring is formed, the caliber of which is so small as barely to admit a silver wire, such as is usually employed to clean out the eyes of silver catheters.

The position of this ring is just above the atrophied spot before described.

The heart, although loaded with fat, does not seem to have undergone material change in its intimate structure. The "spot" is atrophied, but not degenerated. In a single locality—near the apex of the right ventricle—there is an appearance of degeneration. Elsewhere, the tissues are normal.

Dr. T. remarked that the value of this rare morbid specimen would be materially enhanced, by a history of the patient's symptoms and sufferings for a few years antecedent to death. More especially as that singular complaint—angina pectoris—is so often associated in the minds of physicians, since the time of the great Jenner, with ossification of the coronary arteries and excessive deposit of adipose matter. It is not at all unlikely, from the symptoms shown upon the day of her death, that this poor sufferer might justly be classed as a victim to that distressing complaint. But her friendless condition and the absence of surviving relatives preclude a further investigation.

Judging from the appearance of the specimen, without the aid of commemorative circumstances, the atrophy of the lower front part of the left ventricle, and of the adjacent portion of the right ventricle, has insensibly resulted from the gradual diminution of caliber of the anterior coronary artery by the successive deposit of bony matter. It is true that in most instances the collateral circulation supplies the deficiency of the main trunk, but in this case, without resorting to absolute injection, the means of supply appear limited.

As to the immediate cause of death, but little doubt can arise. The irregular contractions of a hollow muscular organ, one part of whose walls has a thickness of eight lines, while another part scarcely reaches two, must eventuate in the distension and rupture

of the weaker point even without the intervention of spasm. But if the aid of the latter be invoked, rupture is inevitable.

Although described in most of the works on the practice of medicine, rupture of the heart must be considered a rare event. A few prominent cases on record are frequently referred to; thus George II., of Great Britain, and a relative of his, a Duchess of Brunswick, both died of a rupture of the right ventricle; Philip V., of Spain, of a rupture of the aorta, just beyond the ventricle. Dr. Elliotson speaks of having seen a case of rupture of the left ventricle, Dr. Watson of another, and, occasionally, a case is reported in the journals.

It is a singular fact, proved by the collections in the various anatomical museums, that when a rupture of the heart does occur, the left ventricle is in nearly every instance the seat of the accident.

Dr. THOMAS also exhibited the cervical vertebræ and other portions of the neck of a female, who had been fatally wounded by a blow with a knife.

Stated Meeting, September 5, 1855.

Dr. BACHE, Vice-President, in the chair.

Present, twenty-nine Fellows.

Dr. FRANCIS W. LEWIS was duly admitted as a Fellow of the College.

Dr. HOLLINGSWORTH, Secretary *pro. tem.*, announced the death of one of the Fellows, Dr. MORETON STILLE, which took place at Saratoga, on Aug. 20th.

Dr. C. WISTER offered the following resolutions, which were unanimously adopted:—

Whereas, the College of Physicians has been notified of the death of its late Fellow, Dr. MORETON STILLE, and desires to ex-

press its high appreciation of the deceased as a scholar and as a member of this institution,

Be it *Resolved*, That by the loss of Dr. M. STILLE, the College feels that a member of great promise has been removed from its roll.

Resolved, That Dr. SAMUEL L. HOLLINGSWORTH be requested to prepare a biographical notice of the deceased for publication by the College.

Resolved, That a copy of these resolutions be transmitted to the family of the deceased.

The Librarian announced as a donation to the Library from Dr. BOND, a set of the *New England Journal of Medicine and Surgery*, in fifteen volumes, and a *Catalogue of the Library of the Pennsylvania Hospital*, which had formerly belonged to the late Dr. William Currie.

From the Publishing Committee of the Pennsylvania Medical Society, a set of its *Transactions* in five volumes.

Stated Meeting, October 3, 1855.

Dr. BACHE, Vice-President, in the chair.

Present, thirty-two Fellows.

The Secretary announced the following donations to the Library:—

From Dr. HEWSON, *A Practical Treatise on Diseases of the Eye*, by William Mackenzie, M. D., &c. Edited by Addinell Hewson, M. D.: 1 vol. 8vo.

From Dr. LA ROCHE, *Yellow Fever, considered in its Historical, Pathological, Etiological and Therapeutical Relations, &c.*, by R. La Roche, M. D.: 2 vols. 8vo.

Dr. THOMAS addressed the College in reference to the use of sulphate of cinchonia as a substitute for the sulphate of quinia, and exhibited to the Fellows some beautiful specimens, &c.

ON THE USE OF SULPHATE OF CINCHONIA, AS A SUBSTITUTE FOR THE SULPHATE OF QUINIA.

BY ROBERT P. THOMAS, M. D.

DR. THOMAS exhibited to the College some beautiful specimens of the three alkaloids, Quinia, Cinchonia, and Quinidia, the active principles of the Peruvian bark, or cinchona of the Pharmacopœia; as also specimens of their respective sulphates.

The quinia was pulverulent, and of a pure white color. The cinchonia had been prepared with great care, so as to secure its crystallization. The crystals assumed the form of four-sided prisms. The quinidia had been obtained with an equal degree of care, and was, in like manner, in the form of prismatic crystals. The sulphates exhibited the characteristic crystals peculiar to each.

After some brief remarks upon the appearance, solubilities, and chemical nature of the specimens, Dr. Thomas observed, that the importance of obtaining an efficient substitute for the invaluable quinia is daily becoming more apparent and more urgent.

Heretofore our supplies of the barks yielding this drug have been exclusively limited to, and derived from, the countries on the western coast of South America, and, more particularly, from Peru and Bolivia; the latter state furnishing the greater part of the true Calisaya, or yellow bark.

From time to time, monopolies for the exclusive cutting of the trees have been granted by the governments temporarily existing, to moneyed capitalists and companies, who could only realize a profit, after paying the exorbitant bonuses required, by an indiscriminate felling of all of the trees within reach, without reference to, and irrespective of, any provision for future supply.

The bark of the root, which is probably very rich in the active principles, and that of the smaller branches, are rejected. The former, on account of the time and labor required for digging it up, and the latter, for the comparatively small yield of the alkaloids.

By this wasteful and destructive method, vast sections of country have already been stripped, without a full development of their resources. And, according to Dr. Weddell, who speaks

from personal observation, the waste is as great at the present day as it has been at any former period.

Another reason for calling the attention of the Fellows to the importance of finding a substitute for quinia, is to be found in the fact that our national Pharmacopœia recognizes the barks from the western coast of South America, only, as officinal. And, on this ground, the drug inspectors of Philadelphia and other ports have actually refused admission to barks from the northern coast, even when they have contained a large percentage of alkaloids, other than quinia.

Of course, a new and inexhaustible supply of efficient barks will at once be opened to us from the latter regions, if experience shall prove that cinchonia and quinidia (which they yield so abundantly) approach quinia in virtues, even though it be but approximatively.

Foremost in the rank of efficient substitutes yet discovered, must, I think, be placed the sulphates of quinidia and cinchonia.

The former article is now being tried extensively, both in this country and abroad, as well in hospital as in private practice.

The latter article—the sulphate of cinchonia—was tried on a limited scale many years ago in the hospitals of Europe, but did not attract much attention. Again it is coming into vogue, and seems to promise results of a valuable character.

In the year 1852 it was introduced in the Pennsylvania Hospital with a success warranting more extensive trials, as shown by a valuable paper on the subject, published by Dr. Pepper, one of the physicians of that institution. In the two following years its use was continued by Drs. Pepper and Gerhard with similar success. The present season they are employing the sulphate of quinidia, the efficacy of which will doubtless soon be made known.

In *Ranking's Abstract* for June, 1855, is a statement that M. Hudellet, Physician to the Hospital at Bourg, had commenced the use of the sulphate of cinchonia in March, 1853, and, "since this time, quinine has been almost altogether supplanted. He gives from four to six grains of the sulphate of cinchonia in solution, adding to the first three or four doses from ten to twenty drops of laudanum, and the result is that, out of 507 cases of intermittents of all kinds, all were cured except nine. This

mode of treatment did not cause any disorder, either in the stomach or the head. Relapses were neither more nor less common than after quinine; and the spleen was affected in the same way, and to the same degree, as by quinine."

To some, this statement may appear to be bordering on the extreme, but it shows at least that the article must be possessed of decided efficiency, or the experiment would not have been continued for a period of two years, and in more than five hundred cases.

To give the cinchonia a fair trial, a number of medical Friends, connected with various public charities here, united with me in prescribing it in all, or nearly all of the cases that presented, and in which quinia would otherwise have been given. The result has been very satisfactory.

In the WESTERN CLINICAL INFIRMARY, the supply of quinia having become exhausted on the first of June last, the sulphate of cinchonia was exclusively introduced into the house by general consent of the medical officers. Consequently it has been used there as a tonic in ordinary cases, and as an anti-intermittent in the neuroses of a periodical character, as well as in the common intermittent and remittent fevers.

By the register, it appears that ten cases of remittent and one hundred and nine of intermittent fever have been under treatment. These were mostly of the mild type prevalent this fall, and, with a single exception, all recovered. The number of relapses has not exceeded that usually observed after the employment of quinia. In fact, the prescribing officers express much confidence in the anti-periodic properties of the cinchonia.

As to the mode of administration, no uniform rule is observed. One gives twelve grains in solution at a single dose, and directs two grains night and morning for four or five successive days, and particularly on the eighth, fifteenth, and twenty-first days. Another prescribes two grains every hour, on the morning of the expected chill, until ten grains are taken, and half of the quantity upon the intermediate days. A third prescribes it in the pilular form in combination with impure piperin, or, with the fluid extract of black pepper.

At the PHILADELPHIA HOSPITAL, it has been tried by some of the assistant physicians, with much benefit in a large number of

cases of disease of malarious origin, but, as their particular history is not yet made out, I can only give this general statement.

At the PHILADELPHIA DISPENSARY, a fair trial has been given it in all those walking cases of intermittent fever, capable of visiting the house during the intermission. These, amounting to one hundred and two in number, have been treated, and the results carefully observed by DR. GEORGE MARTIN, who has kindly prepared the subjoined tables exhibiting the results. He remarks:—

"Our formula for administering the sulphate of cinchonia is the following:—

℞.—Cinchoniæ sulphatis	gr. xxxij.
Tincturæ ferri chloridi	f℥ss.
Aquæ	f℥iv.

S.—Dose, one to three teaspoonfuls, *pro re natâ.*

"The first column of quantity in the table gives the number of ounces of the above mixture required to check the chills, the second, the whole number taken. In most of the cases, when more than two ounces were required to check the disease, it was owing to the patient not having taken it according to the directions. We order two ounces of the above mixture, and direct the whole to be taken in divided doses before the anticipated paroxysm. We have not unfrequently given three drachms at a dose, always diluted with water, and have never known any irritation to follow its administration when the directions have been complied with. In many of the cases, the disease had been running on at intervals for weeks and months, and when the difficulties that have to be encountered by the patients' not returning at proper times for their medicine are taken into consideration, it will certainly appear that the treatment has been followed by as good results as any that could have been adopted.

"I should have stated that in many of the cases of relapse, the disease returned while the patients were at work in the country."

Table of 102 *Cases of Intermittent Fever treated at the Philadelphia Dispensary, by Dr. George Martin, with the Sulphate of Cinchonia.*

[Each fluidounce of the solution used contained rather less than eight grains of the sulphate of cinchonia, and one fluidrachm of the muriated tincture of iron.]

No.	Date. 1855.	Age.	Sex.	Type.	Number of fluido'ces taken to check the chills.	Whole number of fluido'ces taken.	Result.	Remarks.
1	March 8	26	Male	Tertian	2	2	Returned.	The chill in No. 1 returned June 1, when 8 fluidounces more were given. July 1, a second return; 4 fluidounces given. Since which there has been no return.
2	" 8	21	"	"	2	6	No return of chill.	
3	" 12	40	"	Quotidian	2	6	"	
4	" 13	40	"	....	2	6	"	
5	" 17	..	"	Tertian	2	4	"	
6	" 22	31	"	"	2	6	"	
7	" 24	19	Female	"	2	4	"	
8	" 26	45	"	"	2	2	Returned.	No. 8. Return of chill, April 2, when 6 fluidounces were given; without subsequent relapse.
9	" 27	34	Male	"	2	4	No return.	
10	" 30	22	"	"	2	4	"	
11	April 2	25	Female	"	2	6	Returned.	No. 11. Return, April 21, when 2 fluidounces were given; no subsequent return.
12	" 7	22	Male	Quotidian	2	2	No return.	
13	" 7	10	"	Tertian	2	2	"	
14	" 9	12	Female	....	2	6	"	
15	" 11	40	Male	Tertian	2	2	"	
16	" 12	15	"	"	2	4	"	
17	" 16	29	"	"	2	2	"	
18	" 19	35	"	"	2	2	Returned.	No. 18. Return, June 20, when 10 fluidounces were given; without subsequent relapse.
19	" 20	25	"	Quotidian	2	2	"	No. 19. Return, June 11, when 4 fluidounces were given; without relapse.
20	" "	25	"	Tertian	2	2	No return.	
21	" 23	67	Female	"	2	4	"	
22	" "	27	Male	"	2	2	"	
23	" 26	21	"	"	2	2	"	
24	May 1	23	"	"	2	4	Returned.	No. 24. Return, May 24, when 6 fluidounces were given; without relapse.
25	" 3	26	"	"	2	2	No return.	
26	" "	28	Female	"	2	4	"	
27	" 8	26	Male	"	2	4	Returned.	No. 27. Return, June 13; gave 16 grs. of cinchonia and 8 grs. of capsicum in pill; no return.
28	" 9	45	"	"	2	2	Unknown.	
29	" 9	60	"	"	2	6	Returned.	No. 29. Return, May 26, when 8 fluidounces were given; without further return.
30	" 12	37	"	Quotidian	2	4	"	No. 30. Return, June 1 and 23. 6 fluidounces were given; without any further return.
31	" 14	23	"	Quartan	2	4	No return.	
32	" 18	19	"	Tertian	2	6	Returned.	No. 32. Spleen very much enlarged. Return, June 6. 8 fluido'ces were given; without relapse.
33	" 17	25	"	"	2	2	No return.	
34	" "	19	"	Quotidian	2	2	"	
35	" 19	17	"	Tertian	2	2	Unknown.	
36	" 21	48	"	Quotidian	2	4	Returned.	No. 36. Return, June 14, when 8 fluidounces were given; no relapse.

Table of Cases of Intermittent Fever—Continued.

No.	Date.	Age.	Sex.	Type.	Number of fluido'ces taken to check the chills.	Whole number of fluido'ces taken.	Result.	Remarks.
37	May 21	37	Male	Quotidian	2	2	Unknown.	
38	" "	24	Female	"	2	4	Returned.	No. 38. Return, June 4, when 4 fluidounces were given; no relapse.
39	" 22	21	Male	"	2	4	No return.	
40	" 23	25	Female	Tertian	2	2	"	
41	" "	42	"	"	2	4	"	
42	" "	44	Male	"	2	4	"	
43	" 28	19	"	"	2	4	"	
44	" 30	40	Female	"	2	2	Unknown.	
45	June 1	23	Male	Quotidian	2	2	"	
46	" 1	24	"	Tertian	2	8	Returned.	No. 46. Return, July 4, when 6 fluidounces were given; without subsequent relapse.
47	" 6	18	"	Quotidian	2	2	Unknown.	
48	" 21	27	"	"	2	2	Returned.	No. 48. Return, Aug. 19, when 4 fluidounces were given; no relapse.
49	" "	38	"	Tertian	2	2	Unknown.	
50	" 22	30	Female	"	2	2	Returned.	No. 50. Return, July 21, when 4 fluidounces were given; no relapse.
51	" "	25	"	"	2	2	"	No. 51. Return, June 29, when 6 fluidounces were given; no subsequent relapse.
52	" 25	27	"	Quartan	2	4	No return.	
53	" 27	12	Male	Quotidian	2	8	"	No. 53. In this case, the disease has appeared every summer for eight years.
54	" 30	13	Female	"	2	2	Unknown.	
55	" "	40	Male	"	2	8	No return.	
56	July 7	55	"	Tertian	4	12	Returned.	No. 56. Disease of one year's duration. Return of chills, Sept. 13, when 4 fluidounces were given; no subsequent return.
57	" 11	24	"	"	2	2	Unknown.	
58	" "	19	"	Quotidian	2	2	No return.	
59	" 12	40	"	Tertian	2	6	"	
60	" 17	50	"	"	2	2	Returned.	No 60. Return, Aug. 9, when 2 fluidounces were given; no further relapse.
61	" 24	20	Female	Quartan	2	4	No return.	
62	" 25	18	"	Tertian	2	2	Unknown.	
63	" 29	18	"	"	2	2	Returned.	No. 63. Return, Aug. 15, when 4 fluidounces were given; no further relapse.
64	" 31	32	"	"	2	2	Unknown.	
65	Aug. 9	37	Male	Quotidian	2	2	No return.	
66	" 10	18	"	"	2	2	Unknown.	
67	" 16	17	"	"	2	4	No return.	
68	" 20	28	Female	"	2	4	"	
69	" "	38	Male	"	4	8	Returned.	No. 69. Return, Sept. 13, when 4 fluidounces were given; no further relapse.
70	" 22	29	"	"	2	4	No return.	
71	" 23	26	"	Tertian	2	2	Unknown.	
72	" 24	22	Female	"	2	2	"	
73	" 25	26	"	"	4	4	No return.	
74	" 27	21	"	"	2	10	"	
75	" "	20	"	"	2	4	"	
76	" 28	24	"	"	2	4	"	
77	" 30	23	Male	"	2	4	"	
78	" "	21	"	Quotidian	2	4	"	
79	" 31	40	Female	Tertian	2	4	"	
80	Sept. 1	40	Male	Quotidian	2	6	"	
81	" "	59	"	Tertian	6	10	"	
82	" 3	35	"	Quartan	2	2	Unknown.	
83	" 10	30	"	Tertian	2	4	No return.	
84	" 11	25	"	Quotidian	2	4	Returned.	No. 84. Return, Sept. 14, when 8 fluidounces were given; no relapse.

Table of Cases of Intermittent Fever—Continued.

No.	Date.	Age.	Sex.	Type.	Number of fluido'ces taken to check the chills.	Whole number of fluido'ces taken.	Result.	Remarks.
85	Sept. 11	16	Female	Quotidian	2	2	Unknown.	
86	" 12	19	Male	"	2	2	"	
87	" "	30	Female	"	2	2	"	
88	" "	18	"	Quartan	4	4	Returned.	No. 88. Return, Oct. 1, when 6 fluidounces were given; no relapse.
89	" 15	43	Male	Tertian	2	2	Unknown.	
90	" "	39	"	Quotidian	2	6	No return.	
91	" "	41	"	"	2	2	Unknown.	
92	" 18	23	"	"	2	2	"	
93	" 21	20	"	"	4	4	Returned.	No. 93. Return, Oct. 8, when 6 fluidounces were given; no relapse.
94	" 22	19	"	"	2	2	Unknown.	
95	" 24	19	Female	Tertian	2	4	No return.	
96	" "	30	"	Quotidian	2	2	Unknown.	
97	" "	25	Male	Tertian	2	2	"	
98	" 25	17	Female	"	2	2	"	
99	" 26	25	Male	Quotidian	2	4	No return.	
100	" 27	20	Female	"	2	4	"	
101	" 28	11	Male	"	2	2	"	
102	" "	34	"	"	2	4	"	

The value of all statistics depends entirely upon the ability and truthfulness of the observer. And the foregoing tables exhibit internal evidence of the care and observation of Dr. Martin, and of his perseverance in treating a series of cases running over a period of seven months with a single combination, and given always in a similar form.

It will be observed that the whole number of cases amounts to one hundred and two. Of these, fifty-four were absolutely cured, having no return of the chill. Twenty-five are reported as unknown, which means that the patients, after the final prescription, were lost sight of. Doubtless they, also, were all cured, or they would have returned for further treatment. A less careful observer than Dr. Martin would have had no hesitation in reporting them as cured. In twenty-three the chill recurred. In one, at the end of three days; two, at seven days; four, at about two weeks; nine, at about three weeks; two, at one month; four, at two months; and one, at three months.

When it is borne in mind that dispensary patients belong to the laboring classes, who must return to their daily avocations as soon as they suppose the chills are checked, and thus expose themselves to the same causes that originally produced the disease, it cannot be a matter of surprise to find frequent returns recorded; particularly in a disease like intermittent fever, where the tend-

ency to reappearance, independent of external agencies, is proverbial.

But the tables show one striking fact—in no single instance did the disease prove rebellious when the patient took larger quantities of the cinchonia and for a longer period. Every case of relapse was speedily cured by the same remedy.

The same tables enable us to draw an inference as to the average amount of cinchonia required in the treatment of ordinary fever and ague. Thus, in the seventy-nine cases, without relapse, the average taken by each patient was twenty-four and one-half grains.

In the twenty-three cases, with return of chill, the whole average was seventy grains to each patient, embracing all the period he was under treatment. In the total one hundred and two cases, the average was thirty-five grains to each.

A question may very naturally arise, how far the fluidrachm of muriated tincture of iron, contained in each fluidounce of the solution, contributed to the cure. This question, an enlarged experience with the sulphate of cinchonia in different forms of administration and with varied combinations, can alone determine. The reason for its use was based partly upon its affording a convenient mode of dissolving the sulphate of cinchonia, and partly upon the indication for the employment of iron in the anæmic habit of poor patients.

At the NORTHERN DISPENSARY, the resident physician, DR. ALFRED M. SLOCUM, has been investigating the therapeutic effects of cinchonia during the last four months. In this period, seventy-six individuals have been treated for intermittent fever exclusively by this article. At the present time, not one of them is under care, nor has he any reason to suppose that a permanent cure has not been effected in every case. The proportionate number of returns of the chills was about the same as in the foregoing tables, or perhaps even less. A renewal of the remedy uniformly effected a cure.

He administered it according to the following formula:—

℞.—Cinchoniæ sulphatis. . . . ℥ss.
Acidi sulphurici aromatici . . . guttas xl.
Aquæ . . . . . f℥viij.
Solve.

The dose usually given was a tablespoonful (two grains) every

hour in the early part of the morning of the expected chill; and, for the four or five successive days, the same quantity three times a day.

After the chills were checked, he gave three grains of Vallet's mass three or four times daily for two weeks, either alone or in combination with one grain of the sulphate of cinchonia.

For the mere purpose of arresting the chill, Dr. S. has uniformly employed the simple solution above, thereby affording a proof that the cinchonia is possessed of inherent anti-periodic properties independent of all combinations.

A tabular statement of these cases could readily be prepared, but as they will probably be published in detail hereafter, such a statement would be premature here.

The writer of this paper has uniformly employed the cinchonia in his private practice for a twelve-month past, and could furnish some very interesting confirmations of the facts adduced above, but as the paper has already attained an undesigned length, those details must be omitted.

In every instance he has employed it, there has been no evidence of a returning chill. Though this may, in a measure, be owing to the form of combination and to the mode of employment. The form is:—

℞.—Cinchoniæ sulphatis	gr. xx.
Acidi sulphurici aromatici . . .	gutt. vj.
Extracti piperis fluidi	gutt. x.

Misce et fiant pilulæ xx.

The mode is the customary one of giving two pills every hour in the early part of the morning of the expected chill until eight or ten grains are taken. The next day (in the case of a tertian) half of the quantity, and the third day the remainder; after which, the patient is uniformly directed to take six pills on the mornings of the eighth, fifteenth and twenty-first or twenty-second days. Distress in the head, or ringing in the ears, has not been observed in any instance. The concurrent use of iron, or the bitter tonics, is only resorted to where a special indication exists.

The experiences above detailed, derived from the practice of different physicians and in separate institutions, show conclusively, in the writer's opinion, that the sulphate of cinchonia, either alone or in combination, is entitled to more consideration than it has yet received from the medical profession.

Dr. COATES expressed his satisfaction that such trials had been made, and in reference to prevention of relapses, dwelt upon the importance of giving a full dose of the medicine on the 7th, 13th, and 20th days. He reminded members of the practice, sometimes in use, of associating iron with the preparations of bark, and of the antiperiodic virtues of some preparations of the former medicine. He had formerly administered the prussiate of iron in a considerable number of cases, after the method recommended by Dr. Zollickoffer, of Maryland, with extremely good success. He generally used twenty grains within the twenty-four hours; and had failed in a case where, after a series of trials to find the minimum dose, he had given as low as six grains.

Dr. JACKSON (formerly of Northumberland) alluded to the custom of postponing the administration of quinia until four hours before the expected paroxysm, and characterized it as very bad practice. The old and the true method was, to begin to give the medicine in quotidians as soon as possible after the cessation of the paroxysm, and in tertians, upon the intervening well day. He thought that bark and quinia, sometimes, do not produce their full effects for twenty-four hours, and that, if administered in the manner alluded to, the next paroxysm might, *possibly*, occur, but none afterwards.

Dr. J. did not think the prussiate of iron possessed any antiperiodic properties, particularly in the dose mentioned. He had used it during one season, and was highly delighted with its apparent efficacy, but never witnessed it afterwards. In regard to the comparative efficacy of cinchona and quinia, he was persuaded of the greater activity possessed by the former, and he would, therefore, suggest the union, in the same prescription, of the several proximate principles which had been mentioned.

Dr. COATES reiterated his confidence in the virtues of prussiate of iron, which he had continued occasionally to use during several years.

Dr. MORRIS had been very successful in private practice with the sulphate of cinchonine, and had not observed that it produced the tinnitus, deafness, and other head symptoms occasioned by quinia. He was accustomed to prescribe twelve grains during the

apyrexia, in four doses of three grains each, and on the seventh day, to renew the prescription.

Dr. COATES referred to the curative virtues, in periodical fevers, of cornus Florida, and liriodendron tulipifera. He had made very good cures with a decoction of the bark of the root of the former article, and had found it better, on comparative trials, than much of the articles then sold as cinchona in our market—particularly under the name of pale bark. He inquired whether alkalies were now believed by chemists to be extracted from these substances, and referred to Baron Humboldt having believed that cornus contained quinia, on the authority of Dr. Walther.

Dr. JACKSON referred to the announcement formerly made by CARPENTER of an alleged proximate principle of cornus Florida, and which he called *cornine*. The substance procured by him as such, had certainly in his own hands cured an ague, in a patient who could not bear the preparations of cinchona. As for cornus Florida itself, he was satisfied that it possessed febrifuge properties. The country people have great confidence in its virtues, and he had, himself, found it effectual.

Dr. PAGE was disposed to believe in the power of dogwood bark to cure intermittent fever, since he had not only confidence in the testimony furnished by others, but he had himself been cured of the disease by its means.

Dr. THOMAS had frequently employed cornus Florida as an antiperiodic, and uniformly failed in detecting any such virtue in it, and had been equally unsuccessful in obtaining from it any active principle whatever, although experiments had been made by himself and under his direction with this object. The extract had no effect more than extract of gentian would have had. The truth appears to be, said Dr. THOMAS, that whatever makes a strong impression, any stimulant agent particularly, will sometimes suspend or cure the paroxysms of intermittent fever. The country people have many specifics of this sort, of which the cimicifuga is, perhaps, the most popular. As for the liriodendron, it does possess an active principle, but one which has not been fully tested in the treatment of disease.

Dr. HENRY HARTSHORNE exhibited to the College an apparatus for the treatment of fractures of the thigh, in which a new mode of counter-extension is employed.

That it is not superfluous to attempt to improve upon the treatment of this fracture, notwithstanding the number of contrivances for the purpose, would appear from the general feeling of the profession in regard to it, as most strongly expressed by Dr. Hamilton, of Buffalo, in his report upon fractures, to the American Medical Association, this year.

The essential idea of the apparatus exhibited, was one which occupied the mind of the late Dr. Joseph Hartshorne, not long before his fatal illness. A recent case under the care of Dr. H. H., in the person of a young lady, with whom it was impossible to prevent excoriation of the perineum by Desault's or Jarvis's apparatus, induced the recollection of this idea, and the endeavor to realize it.

The train of reasoning pursued was as follows. The desideratum in this, as in all fractures, being to obtain a secure extension of the limb, to a sufficient degree, without injury or distress of the integument—the difficulty of course is greatest in the thigh, on account of the power of its muscles. It is true that the *chief* difficulty, with regard to excoriation, has been at the ankle; and that this has been removed by the use of adhesive plaster for the extension, in the manner employed by Dr. Ellerslie Wallace of this city, and by Dr. Gross, and now adopted in the Pennsylvania Hospital. But, in many cases, there is also much trouble with the perineum; and no method has yet been devised, by which the adhesive plasters alone may be used for counter-extension. In all the forms of apparatus in use, there is a constant compromise between the effort to *extend the limb*, and the endeavor to *preserve the skin*. One of these ends is incessantly sacrificed more or less to the other. In Desault's splints, this is evidently so to such an extent that, if daily removal of the dressings and friction of the parts be not practised, excoriation may very probably occur, and defeat the extension. This *frequent disturbance* of a fractured limb must, of course, be objectionable in every way.

In the employment of the modification of Boyer's splints, which has the name of Hartshorne's apparatus, in which a pad or crutch is substituted for the perineal band, the same difficulty occurs, although to a less extent.

Jarvis's adjuster, when applied to a fracture of the thigh, will, as was fully shown in the case of the lady above alluded to, produce excoriation, both in the perineum and above the knee, as soon as any other; while the greater power under our control renders the liability to this accident still greater.

It will be hardly too much to say, as to Hagedorn's apparatus, that, without the elongation of the splints to the axillæ, as modified by Professor Gibson, the counter-extension is not at all reliable, on account of the movement of the pelvis toward the injured side; while, if we use the elongated splints, the confinement of the position, with both limbs and the trunk under restraint, must be unbearably irksome.

What is yet needed, then? Evidently, to have the counter-extension applied to a part which is adapted and accustomed to pressure.

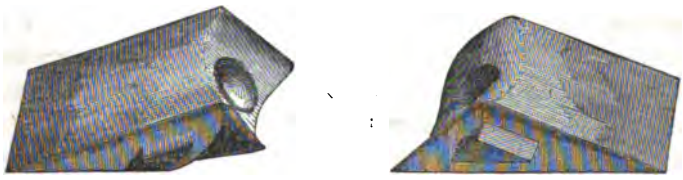
No part of the body is so particularly adapted to pressure as the region of the *tuberosity of the ischium*. With regard to firmness of pressure upon this part, an illustration may be drawn from the stop or wedge used upon railroad inclined planes, to arrest the descent of cars from accident; consisting of a short inclined plane.

For perfect security, in this case, it may be perceived that the short inclined plane should have an inclination perpendicular to the line of impulsion of the body to be arrested. This line is a diagonal between two forces; the force of gravitation, perpendicular to the earth, and the force of impetus in descent of the car, or of extension in the limb. This force of extension, in the case of a fractured thigh under treatment, acting in the line of the limb, *i. e.*, horizontally, and the force of gravity being exerted in a perpendicular direction, a diagonal between these will be at an angle of 45° with the bed. A plane to which this diagonal is perpendicular, *i. e.*, one whose angles with the bed are 135° and 45°, will afford the requisite firmness for resistance in the counter-extension of the thigh. It will be impossible for the pelvis to slide over it, so long as no force is used except that of gravity and that of the extension in the axis of the limb.

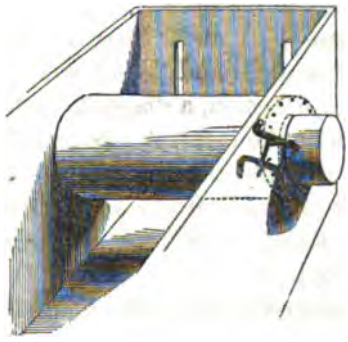
Having constructed a block, then, upon this idea, a *lateral* concavity may be made in it without altering the direction of its pressure, to adapt it to the form of the seat. It thus resembles

a portion of a saddle, or a privy-seat. Its height may be three or four inches; its width, seven or eight. A *socket* may also be scooped out for the reception of the tuber ischii; although the necessity of this is questionable. In a trial upon his own person, in which a force of 200 lbs. pressure was exerted upon the block by a muscular man, Dr. H. has convinced himself that a very much greater amount of pressure can be sustained in this way, than could possibly be endured upon the perineum. The difference is exactly that which exists between riding upon a *saddle* and upon a *rope*.

It is necessary, then, only to cut away that portion of the block which might incommode the patient in defecation, and to fix it firmly between two splints, resembling those of Desault. At the



lower end of these may be placed a foot-board, connecting the splints, for the purposes of extension. It is well to add, also, what is believed to be the best method of commanding extension: by fastening the ends of the adhesive strips, or tapes, to a *cylindrical roller*, hung between the splints, as exhibited in the drawing.



This may then be controlled by a handle, in the manner of a windlass, being prevented from returning by the insertion of a

pin or catch, through any one of a series of holes in the outer splint.

The only *à priori* objection which has been suggested to the above mode of counter-extension is, the supposed possibility of the patient lifting himself, so that the pelvis will ride over the block. This is evidently impossible without a strong voluntary effort, or one made during sleep or in delirium. The socket for the tuber ischii would act as a lock or latch, much increasing the security against such an escape. But a further protection may be readily obtained, in two ways:—

First, let a horizontal slit be made near the upper end and edge of the inner, and the opposite portion of the outer splint, of about six inches in length; through these slits and over the thigh, as well as around under the splints and limb, let there be passed a broad bandage, or splint-cloth, with its ends torn into 4 or 5 tails, of several inches in length, so as to tie in as many knots. This will effectually secure the thigh from rising so as to remove or lessen the counter-extension.

Secondly, we may also use *adhesive plaster* to aid in this security, by fastening a wide piece of it underneath the block, and bringing it up over its concave surface; the warmth of the body will cause it to adhere, and make it altogether impossible for the pelvis to rise without carrying the block with it.

By adding a wide junk-bag filled with bran, to lie under the whole length of the limb below the block, and two smaller ones, like those used with Desault's splints, to lie upon the sides—we have the apparatus complete.

The mode of fastening the upper ends of the splints to the sides of the block, may be much a matter of choice. It is unnecessary to occupy time or space with a description of the simple arrangement used in the model exhibited. It is well, however, to have the outer splint removable.

In compound fractures, of course, it will be better to have a complete box made, by affixing a bottom between the two splints through their whole length.

The same means of counter-extension precisely, may, of course, be equally well adapted to the treatment of fractures of the *leg* requiring extension. It is not impossible, even, that, with some modification, the counter-extending block, or pelvic crutch, may

be used instead of the perineal band in treatment of *luxations* of the femur. A glance at the skeleton, or an exploration of the ischio-gluteal region of the body in the recumbent posture, will show to any one the amount of *purchase* there at our command.

With regard to the novelty of the above method of counter-extension, Dr. H. has found nothing bearing any resemblance to it, unless it be a contrivance of M. Bonnet, of the *Ecole de Médecine* at Lyons.* This consists of a *wire-work* shaped to fit the limb, which rests upon it. But it does not appear, either from the text or the plates of M. Bonnet's work, that any considerable force of counter-extension could be applied by its means: it being used chiefly for fractures of the *neck* of the femur, and for subluxation in coxalgia. The difficulty of its construction, also, is in the way of the use of such an apparatus.

Metallic "gouttières," or troughs, were used by A. Paré in treatment of fractures of the leg; afterward by Ravaton, and particularly by M. Mayor, of Lausanne. But in none of them does there appear to be an arrangement of a sort adapted to fractures with decided shortening of the limb.

The apparatus described, was exhibited by Dr. H., in the hope that some of the Fellows of the College might afford an opportunity, by trial, upon a patient, for the decision of the question, whether or not it is available in actual practice; a test by which every contrivance, however plausible in appearance, must abide.

Dr. JACKSON thought there must be a great difference between city and country patients under treatment for fractured thigh. It appeared to be the rule in hospital practice, for ulceration of the foot to be produced by the counter-extending bands; the reverse was the case in the country. Dr. Physick did not use a garter at first, but a handkerchief, which was sure to produce excoriation. For his own part, he had used both; in the case of the former, he had the garter sewn in its place, and in all cases, he had the parts gently rubbed several times a day. In regard to the bands of adhesive plaster, recently revived as counter-extending agents, he had used them in 1814 in a case of compound

* Maladies des articulations.

fracture, and subsequently in connection with Hutchinson's splints, to prevent swelling of the foot and ankle.

Dr. COATES remarked that the early use of extension by means of bands applied *over* adhesive plaster was familiar to him. The buckskin gaiter, which was employed during his service at the Pennsylvania Hospital, between 1811 and 1819, appeared to him defective from yielding to extension. He had been unable, by any measurement, to prove with certainty the existence or non-existence of shortening which did not exceed the thickness of a middle finger, estimated at half an inch. Within this, he believed, after many and careful measurements, that about half the cases were reduced by the use of Dr. Physick's splint. He thought it absolutely impossible, during permanent extension, to prevent the inflexion of the pelvis towards the extended side; and this relaxed the extension often, he apprehended, without the observation of the practitioner. Inflexion of the pelvis also rendered it extremely difficult to measure the shortening, with any approach to accuracy. The same change of position of parts would, however, overcome a very sensible shortening when the patient came to walk, and thus very greatly palliate the evil.

Dr. H. HARTSHORNE and also Dr. MORRIS protested against the results collected by Dr. Hamilton, and those stated in the present discussion, being taken as an admission that no perfect cures of fractured thigh were possible. On the contrary, the imperfections of existing methods ought to furnish indications for the improvement of apparatus, until all the existing defects were overcome and remedied.

Dr. JEWELL called the attention of the Fellows to the sensible decrease of deaths, as recorded in the bills of mortality of our city for the third quarter of the present year, embracing the months of July, August, and September, when compared with those for the same period of last year.

In the third quarter of 1854, the deaths were 4531; this year, in the like quarter, they were 3387—exhibiting a decrease of 1144, equal to 13.18 per cent. This falling off, Dr. J. thought,

would serve as an index for the unusual degree of health our city had enjoyed during the present season.

The principal difference in these statistics, Dr. JEWELL said, would be found amongst the diseases in the zymotic class. In 1854, during the third quarter, the deaths from cholera asphyxia were set down at 521, whereas, in the corresponding quarter of this year, 1855, under the head of cholera, in contradistinction to cholera morbus, they were only 27, a falling off of 494. In cholera infantum there will be found a decrease of 94. Cholera morbus, 74. Diarrhœa, 52. Dysentery, 135. The only disease in this class, in which there has been an increase worthy of observation, is the smallpox, having gone up from 4 to 58, showing an increase of 54.

In the diseases of uncertain or general seat, nervous system, organs of respiration, old age, external causes, and unknown, there has also been a falling off; but in the diseases of the digestive organs, and among the stillborn, there has been a slight increase.

In answer to a question, Dr. JEWELL replied, that the record of last year, 1854, with which he had made the comparison, embraced the returns from the whole county, as far as they could be secured.

Dr. RAND suggested that the increase of deaths from smallpox might be owing to the fact that public vaccination among the poor had been very much neglected during the present year. Dr. J., however, while he admitted that this cause may have had some influence, attributed it, chiefly, to the law of periodicity, as noticed by Professor Jackson in a paper read at the annual meeting of the Medical Society of Pa., in 1850, in which he referred to its arriving at its maximum point in from three to five years, and then declining, gradually, during a similar period, as illustrated by the statistics of several cities for a series of years. This year, Dr. J. believed that the disease was in the ascending scale and approaching its maximum.

Dr. RAND thought that vaccination had, of late, been neglected among the poor, some of whom complained that the collectors of vaccine cases do not call upon them, while others do not know by what means to get vaccinated.

SUMMARY

OF THE

TRANSACTIONS OF THE

COLLEGE OF PHYSICIANS

OF PHILADELPHIA.

FROM NOVEMBER 7, 1855, TO FEBRUARY 6, 1856, INCLUSIVE.

Stated Meeting, November 7, 1855.

Dr. WOOD, President, in the chair.

Present, twenty-nine Fellows.

DR. F. G. SMITH presented a copy of *Principles of Human Physiology*, by W. B. Carpenter, M. D., 6th American edition, edited by F. G. Smith, M. D. The College then proceeded to the election of a Committee of Publication. After ballot, it appeared that the present Committee, consisting of Drs. F. G. SMITH, JACKSON, and HOLLINGSWORTH, was re-elected.

A Committee, composed of Drs. STOCKER and MAYBURRY, was appointed to make application to the Board of Managers of the Pennsylvania Hospital for permission to underlet the Hall of the College for the meetings of the Philadelphia County Medical Society.

Dr. WOOD made the following remarks upon

ACETATE OF LEAD IN YELLOW FEVER.

He said that the recent prevalence of Yellow Fever in Norfolk, and many parts of the South, had called general attention

to that disease; and any suggestion in relation to its treatment might be considered at present as peculiarly appropriate. There was one point in the therapeutics of the affection to which, he thought, scarcely so much attention had been directed as it merited. It was well known that the first stage of the disease usually consisted of one long, continuous, febrile paroxysm, which, after a duration of one, two, or three days, rather suddenly subsided into a period of apparent remission, in which, however, though the febrile excitement was diminished, there was no decrease of the danger. This, indeed, was the period of greatest danger; the patient, in bad cases, being much prostrated, and often throwing up large quantities either of pure blood, or of altered blood in the form of black vomit. He knew well that, in a great many cases, all remedial efforts were of no avail; the blood being irreparably poisoned by the violent action of the cause. But there were others in which the chances were about evenly balanced between life and death, and in which the occurrence of gastric hemorrhage might turn the scale against life, by increasing a debility already as great as the vital forces were adequate to struggle through. In such cases, it appeared to him that there was a strong indication to prevent this exhausting hemorrhage.

Besides, in the same stage, there is a species of inflammation of the gastric mucous membrane, as indicated by the exquisite epigastric tenderness during life, and the appearances presented upon examination after death. This strongly tends to a disorganization of the tissue, and to that effusion of altered blood, so well known and so much dreaded under the name of black vomit. Dr. Wood believed that this discharge was not attributable solely to the state of the blood, but somewhat also to the condition of the mucous membrane. Here then was another indication; namely, to obviate the phlogosed condition of the membrane, to empty, as far as possible, the inflamed vessels of the blood that was distending them, and thus give them some opportunity of resuming their healthy functions.

Now he knew no medicine so well calculated to meet these two indications as the acetate of lead, at the same time an energetic astringent and a decided sedative. This remedy had, so long since as the year 1820, been recommended and employed

by Dr. Irvine, of Charleston, S. C., who wrote a pamphlet on the subject, the substance of which may be seen in the *Eclectic Repertory* of the same year (vol. x. page 519). Having perused this pamphlet, Dr. Wood had an opportunity of trying the remedy in a severe case, which occurred towards the close of the epidemic that appeared in Philadelphia in 1820; and he was much pleased with its apparent effects. In this case, the patient had, at the beginning of the second stage, begun to throw up a darkish flocculent matter, which appeared as if it might be the result of a commencing effort to form black vomit. The acetate of lead was given, as recommended by Dr. Irvine; and the patient ultimately recovered. This was the only case of the disease he had under his charge on that occasion, after reading Dr. Irvine's account of the remedy. Two others had since occurred to him; one some years since in the person of a seaman from the South, in the Pennsylvania Hospital; and the other recently, in that of a student of medicine who had come to Philadelphia to attend the medical lectures, and on the way had passed through two towns in which the fever was prevailing at the time. He had the characteristic phenomena of a fever of two days' duration, and a remission of the febrile symptoms at the end of that time, with intense tenderness in the epigastrium, and deep yellowness of the skin. Both of these cases recovered under the use of acetate of lead. He did not pretend that the three cases mentioned were at all decisive as to the efficacy of the remedy under the circumstances mentioned; but they were certainly sufficient to justify a further attention to the subject, and a more ample trial.

Dr. Wood had sought in vain among the medical journals of late, for testimony in relation to the use of the acetate. Such testimony may have been given; but it had not fallen under his notice. He had heard that, in a particular locality, the remedy had been tried, and not been found to answer. But it may not have been employed at precisely the right juncture, or in sufficient quantity, or in a sufficient number of cases, to justify a determination of its value on this score. Before it can be pronounced to be worthless, it must have undergone a much more extensive trial, and under a variety of circumstances. He did not suppose that it would cure all cases. He should despair of a cure from it after black vomit had fairly taken place. But, with

his present views, he considered it as probably having the power of preserving life in some cases, and as deserving of the notice of the profession.

Attention is necessary to the period and circumstances of its administration. It should be commenced with at the earliest signs of the approach of the second stage. This was highly important, as, after this, it would probably be too late. It should be given in doses of two grains every two hours, without the accompaniment or simultaneous use of any other substance that might serve to decompose it; and should be continued steadily until thirty-six grains have been taken. The use of this remedy does not preclude the application of leeches or a blister to the epigastrium, one or both of which Dr. Wood had employed in all the three cases referred to.

Dr. CONDIE said that in 1820 he had had the opportunity of witnessing the employment of this remedy. It was, however, given rather to arrest than to prevent black vomit, and was found to be quite useless.

Oil of turpentine, he thought, exerted some control over the symptom in question, and this he believed was the case in the practice of other physicians as well as in his own. His own results and those of other professional gentlemen, from the use of acetate of lead, also perfectly coincided.

Dr. LEVICK thought that in the case referred to by Dr. Wood, and which he also had attended, there were several points of interest. The patient came from a healthy locality, and on his way to Philadelphia merely passed through the infected places. In company with him were three other persons, and they all escaped the disease. Again, he was attacked just two weeks after passing through the town of Jackson, where yellow fever prevailed, and also after frost had occurred there. The phenomena of invasion were also remarkable. On the first day of his sickness the patient had an attack of cholera morbus produced by indulgence in eating oysters. A copius eruption of urticaria appeared upon the skin, but had receded by the evening, and the indisposition appeared at an end. On the next day at noon he was seized with a chill, and in the afternoon the nettle rash reap-

peared. This was the commencement of the yellow fever; and the next day the conjunctivæ were injected and jaundiced. There was great epigastric tenderness, and the patient shrank from the least pressure upon this region. His pulse was 120; he had no pain in the back, but severe pain in the head whenever he moved.

Dr. EMERSON referred to the importance which is attached to tenderness of the epigastrium, by the creole practitioners of New Orleans, as a distinctive mark of yellow fever. It was usual for this region to be sensitive in the various grades of bilious fever, but the acute tenderness, the shrinking from contact which had been mentioned, appeared to be peculiar to the disease at present under notice.

Dr. LA ROCHE observed that the absence of lumbar pain was a peculiarity of the late epidemic. Such was the fact in a case which terminated fatally in this city, and it had also attracted attention in the South. In regard to the epigastric tenderness, he must affirm that it was not always excessive. In most cases, too, it did not come on with the primary symptoms, but was developed on the third or fourth day. The late Dr. Monges was of opinion that in bilious fever this symptom made its appearance earlier. In the case recently observed by Dr. La Roche, there was no sensitiveness of the epigastrium to pressure. It was true, Dr. L. admitted, in reply to an inquiry of the Secretary, that this case was one of relapse in consequence of great errors of diet. And, on the whole, it must be acknowledged that the symptom in question does really exist in a large majority of the cases, while at the same time it cannot be regarded as essential or pathognomonic.

Dr. T. H. BACHE stated that in all of twenty-three cases which he studied at the Pennsylvania Hospital in 1853, this symptom was strongly marked. A number of cases of bilious fever were at the same time in the institution, and in none of them did such extreme sensibility of the epigastrium exist. In fact, the sensibility alluded to was so great that the mere approach of the hand, as if to examine the epigastrium, would cause the patient

to shrink, and give signs of the keenest apprehension. Indeed, this phenomenon soon came to be looked upon by the attendants as a distinctive and certain sign of yellow fever.

Dr. WOOD remarked, as a peculiarity of this symptom, that patients who manifested it seldom complained of spontaneous suffering in the stomach. The pain appeared to be excited by external pressure alone.

Dr. JEWELL said that he had seen two cases during the late epidemic, and in neither was there any great degree of epigastric tenderness. But one was a very mild case. In neither of them was there much pain in the head or back.

Dr. WEST, on behalf of the Library Committee, presented to the College an engraved book-plate, which had been procured by private subscription.

On motion of Dr. THOMAS, the book-plate was accepted, and the thanks of the College returned to the donors.

Stated Meeting December 5, 1855.

Dr. WOOD, President, in the chair.

Present, twenty-three Fellows.

The Librarian, Dr. T. H. BACHE, read the following letter announcing a donation to the Library:—

PHILADELPHIA, Dec. 5, 1855.

DEAR SIR:—My sister, Mrs. Moreton Stillé, desires to present as a memorial of her late husband, a portion of his medical library, to the College of Physicians. These books once contributed to foster his taste for literary and scientific culture, and she now ventures to hope that they may prove acceptable to his former associates devoted to the same studies and pursuits.

A catalogue of the books is annexed, from which you will learn that they consist of one hundred and nineteen separate works, in one hundred and thirty-seven volumes. They are chiefly in the English, French, and German languages, and on the following subjects:—

Anatomy and Physiology	29	works.
Pathological Anatomy	9	do.
Principles of Medicine	7	do.
Practice of Medicine	13	do.
Midwifery and Diseases of Women and Children	10	do.
Diseases of the Chest	9	do.
Special Medical Diseases	4	do.
Surgical Diseases	14	do.
Materia Medica and Therapeutics	7	do.
Medical Jurisprudence and Toxicology	13	do.
Miscellaneous	4	do.
	119	do.

Will you be good enough to announce this donation to the College, and believe me,

Very sincerely, yours,

T. H. BACHE, M. D. ALFRED STILLÉ.

On motion of Dr. THOMAS, the following minute was unanimously adopted:—

In accepting the donation of books from the widow of our late Fellow, MORETON STILLÉ, M. D., the College desires not only to express its sense of the value of the gift, but also its high appreciation of the interest that prompted it,

Therefore *Resolved*, That the thanks of the College be tendered to Mrs. Stillé for the very handsome donation to its Library.

Dr. STOCKER, from the Committee appointed to procure an alteration of the Charter of the College, changing the time for the annual election of its officers, reported a decree of the Court of Common Pleas in the premises, and offered the following resolution, which was unanimously adopted:—

Resolved, That the College of Physicians hereby accepts the amendment of the Sixth Article of its Charter, approved by the Court of Common Pleas on the 3d day of December, 1855, substituting in said Article the words "first Wednesday in the month of January next, and annually thereafter," in place of the words "first Tuesday in the month of July, for ever hereafter."

Notice was given of certain amendments of the By-Laws to render them conformable to the amended Charter.

A proposition for Fellowship (62) was presented.

The Secretary, on behalf of the Committee of Publication of the American Medical Association, presented Vol. VIII. of the *Transactions* of that body.

PREVALENCE OF INTERMITTENT FEVER AND SMALLPOX.

Dr. BELL stated that he had heard of a prevalence of intermittent fever in the city, among persons who had not been out of town. He had not met with anything of the sort himself, and wished to learn what other physicians had observed.

Dr. COATES had seen but one such case himself; it was of the quotidian type and had yielded to quinine, although the convalescence of the patient was unusually slow.

The PRESIDENT had heard that the disease prevailed beyond the city in unusual situations. In the mountains near Bedford, for example, he was informed that eight cases had originated within a district, where, for twenty years before, no such affection had showed itself.

Dr. THOMAS stated that during the present season there had been an unusual demand for the preparations of cinchona, a fact which seemed to indicate a corresponding prevalence of periodical fevers.

Dr. H. HARTSHORNE suggested that the augmented sales of this class of medicines might perhaps be explained by the vast increase of the population in newly settled districts, where, of

course, the number of cases of intermittent and other forms of periodical fevers would augment in a large proportion.

Dr. JEWELL had not himself noticed any prevalence of intermittent fever, although he had heard of it, and suggested that it might perhaps be in the newly built districts near abandoned brick-yards.

Dr. J. had, however, observed a marked increase of deaths from smallpox. Since the first of January last two hundred and forty had been reported, and four-fifths of these were in persons under ten years of age. He inquired whether this occurrence might not have some connection with the fact that during the first six months of the year, owing probably to the difficulties connected with the organization of the new municipal government, there had been no vaccine physicians, and since their appointment no collectors of vaccine cases. The reports of the vaccine physicians during the quarter beginning June first, were very meagre. Only eleven out of the twenty-four had reported, and these no more than 360 successful cases, or about 36 for each physician. During the last quarter, seven reports only had reached the Board of Health, comprising 303 cases. These facts, it was remarked, show that the work of vaccination has been very imperfectly performed, owing to the negligence of the constituted authorities.

The PRESIDENT inquired whether the Board of Health would not call the attention of the City Councils to the subject?

Dr. JEWELL replied that it did not devolve on the Board of Health, as an official duty, to do so, but very probably they might feel induced by the importance of the subject to give it their attention.

Stated Meeting, January 2, 1856.

Dr. WOOD, President, in the chair.

Present, twenty-eight Fellows.

Alterations of the By-Laws in accordance with the amended Charter were adopted, and a new edition of the Charter, Ordinances, and By-Laws was ordered to be published.

The Trustees of the Building Fund presented their annual report, as follows:—

REPORT.

When the last report was made in January, 1855, there remained uninvested the sum of one hundred and thirty-three dollars and seventy-five cents ($133 75).

Since that period the trustees have received, in interest and dividends, the sum of eight hundred and three dollars and sixty-nine cents ($803 69), and a contribution to the building fund of fifty-six dollars and sixty-two cents ($56 62); besides a dividend on the Schuylkill Navigation Company's preferred stock, of twenty dollars and eighty cents ($20 80) in the Boat Loan of the Company; the whole amount received in cash being eight hundred and sixty dollars and thirty-one cents ($860 31).

With this sum the trustees have purchased

Of city six per cent. loan, six hundred dollars, at the cost of	$525 00
Of city five per cent. gas loan, four hundred dollars, at the cost of	340 00
Of city five per cent. loan, one hundred dollars, at the cost of	73 25
Together costing	938 25

Their account, consequently, stands as follows:—

Sum on hand January 1, 1855	$133 75
Whole receipts in cash in 1855	860 31
Together amounting to	994 06
Deduct the investments made in 1855	938 25
And there is left in their hands at this date	55 81

Since their last report, the trustees have converted several different small items of investment in the Schuylkill Navigation Company's Common and Preferred Stock and Loan, including the twenty dollars and eighty cents of Boat Loan already referred to in this report, into an equivalent amount, at the prevalent market price, of the Mortgage Loan of the same company, for which they now hold a certificate amounting to three hundred and eighty-four dollars and seventy-five cents ($384 75).

The following are the securities now belonging to the fund, with their value at par, viz:—

Of the Schuylkill Nav. Co.'s convertible mortgage loan	.	$962 25
" Chesapeake and Delaware Canal Co.'s loan	. .	545 16
" Pennsylvania Railroad stock (four shares)	. .	200 00
" City six per cent. loan	.	4500 00
" City six per cent. gas loan	.	1100 00
" City five per cent. loan	.	4900 00
" City five per cent. gas loan	.	700 00
" Spring Garden six per cent. loan	.	1300 00
" Penn District six per cent. loan	.	1700 00
		15,907 41

At the last report the whole amount of the fund invested was at par $14,889 66, so that it has increased in the last year, at the par value of the securities, $1017 75.

If to the amount of investments above stated, there be added the money on hand and the interest now due, there will be an aggregate of $16,400; and, although the present price of the securities in which the investments are made is considerably below par, yet it is believed that the full amount will be realized when these securities shall become payable.

GEO. B. WOOD,
GEO. FOX,
JNO. RODMAN PAUL.

PHILADELPHIA, January 1, 1856.

The following donations to the Library were announced:—

From Dr. KEATING, a new edition of Ramsbotham's *Principles and Practice of Obstetrics;* edited by Dr. Keating.

From Dr. SAMUEL LEWIS, *Memoirs of the Medical Society of London*, 5 vols.; Spurzheim *On Insanity.*

From Dr. STILLÉ, *Medico-Chirurgical Review*, to April 1841, 38 vols.; and various other works, comprising 69 volumes.

The College then proceeded to ballot for Dr. S. WEIR MITCHELL, a candidate for Fellowship, and he was pronounced to be duly elected.

On motion of Dr. WEST, an appropriation was made of one hundred and twenty-five dollars for the use of the Library.

An election of Officers for the ensuing year was then held, as provided for by the amended Charter, and the following gentlemen were elected:—

President.—GEORGE B. WOOD.
Vice President.—FRANKLIN BACHE.
Censors.—HENRY BOND, JOHN WILSON MOORE, SAMUEL JACKSON, GEORGE W. NORRIS.
Secretary.—ALFRED STILLÉ.
Treasurer.—JOHN RODMAN PAUL.
Curator.—JOHN NEILL.
Librarian.—T. HEWSON BACHE.
Library Committee.—SAMUEL LEWIS, D. PAUL LAJUS, FRANCIS WEST.

Stated Meeting, February 6, 1856.

Dr. WOOD, President, in the chair.

Present, twenty-five Fellows.

Dr. JEWELL presented and read the following

REPORT ON METEOROLOGY AND EPIDEMICS FOR THE YEAR 1855.

In presenting the report on meteorology and epidemics of Philadelphia, for the year 1855, we have endeavored, as far as circumstances would allow, to preserve the plan adopted by Dr. Ruschenberger, and which he so ably and elaborately carried out for several successive years.

Nor should we be doing justice to that distinguished fellow of the college, were we to neglect an acknowledgment of our indebtedness to his labors for valuable assistance, in arranging and completing our mortuary tables. We may be allowed, however, to add that while we have preserved the general form of those made to the college for a series of years, for the advantage of retaining a uniform plan of grouping the diseases therein named, and in preserving the order of statistical calculations, by comparisons and percentages; we have not confined our observations definitely to the limits of those reports.

On the other hand, we have somewhat extended them. We have given other tabular forms and statistical analyses. These, we trust, however imperfect in detail, will neither be considered uninteresting to the general reader, nor unimportant as reliable contributions, as far as they extend, to the ever accumulating mass of medical statistics.

It is only by gathering and preserving accurate vital statistics of our city for a consecutive period of years, and comparing them with the changes of its population, by births, deaths, and other causes; by its climatical transitions, the results of epidemics and the various diseases, with their treatment, the particular season of the year when most prevalent, the sex, age, profession,

habits of life, and local habitation of those attacked, and other physical influences, that we can ever reach the proper investigation of disease, or learn accurately the etiology of epidemics.

This information is also indispensable in order to elucidate the causes for the increased mortality ascribed to every large city. Nor is it less important for guarding against the unnecessary recurrence of disease, and thereby contributing to the salubrity of cities, as well as to promote the comfort and prolong the existence of their inhabitants.

The investigation of the meteorological condition of the atmosphere surrounding a city; its barometrical, thermometrical, and electrical states; the variations of the dew-point, or force of vapor, the course and velocity of the winds, the amount of rain and other circumfusa, which contribute to make up the character of climate, and exert a controlling influence in modifying the physical functions, giving rise to morbid phenomena or maintaining health and life in their most vigorous action, has always been an interesting and important subject of inquiry to the vital statician, as well as to the physician. It also bears a close and inseparable relation to medical contributions, having a peculiar direction to the etiology, the progress and decline of diseases, more especially those which appear in an epidemic form.

As this department of science, the phenomena of the weather, has always received special attention in these reports, we shall not omit to give it a prominent place.

For this purpose we have availed ourself of the highly valuable and faithful meteorological observations made and recorded by Prof. James A. Kirkpatrick, of the Philadelphia High School, who very politely and kindly furnished the following abstract of his daily observations, or a summary of the monthly and annual means for 1855.

Abstract of Meteorological Observations made at Philadelphia, Pa., Lat. 39° 57′ 28″ N., Long. 75° 10′ 40″ W. from Greenwich, for the year 1855. By Prof. JAMES A. KIRKPATRICK.

1855.	BAROMETER REDUCED TO 32° F.				THERMOMETER.				DEW-POINT, 2 P. M.				Force of vapor, 2 P. M.	Relative humidity, 2 P. M.	Rain and melted snow. Inches.	WINDS. Monthly resultant; No. of times in 1000.	REMARKS.
	Mean inches.	Highest inches.	Lowest inches.	Range inches.	Mean degree.	Highest degree.	Lowest degree.	Range degree.	Mean degree.	Highest degree.	Lowest degree.	Range degree.					
January . . .	29.971	30.610	29.163	1.447	34.4	62	16	46	28.6	52.7	12.7	40.0	.157	.72	2.601	N. 17½° W., 46-100	*Coldest day.* Feb. 6. Mean temp. 4½°. Thermometer lowest, Feb. 7, —1° (one degree below zero).
February . . .	29.840	30.199	29.535	0.664	26.7	46½	—1.0	47½	18.8	45.3	—2.0	47.3	.111	.71	2.480	N. 50° W., 83-100	
March	29.798	30.272	29.310	0.962	38.8	64	16	48	27.3	44.7	20.0	24.7	.152	.53	1.979	N. 60° W., 61-100	
April	29.856	30.179	29.234	0.945	52.9	87	22	65	40.4	55.3	21.3	34.0	.231	.54	2.148	N. 52° W., 39-100	
May	29.807	30.124	29.449	0.675	63.8	87	40	47	46.1	60.7	25.3	35.4	.321	.43	3.033	N. 48½° W., 56-100	*Warmest day.* June 30. Mean temp. 83½°. Thermom. highest, 95° on June 30 and July 19.
June	29.739	30.020	29.395	0.625	71.9	95	51	44	59.4	77.5	41.3	36.2	.537	.57	8.008	S. 76° W., 46-100	
July	29.851	30.135	29.645	0.490	79.7	95	57	38	68.7	78.5	52.4	26.1	.712	.62	6.594	S. 68° W., 43-100	
August	29.923	30.256	29.514	0.741	75.0	84	55	29	64.0	75.2	47.8	27.4	.616	.62	3.237	N. 33½° W., 7-100	
September . . .	29.962	30.224	29.623	0.601	70.2	90	45	45	60.7	71.9	43.9	28.0	.551	.61	4.129	N. 67° W., 17-100	*Barometer.* Highest, 30.610, Jan 8. Mean for the day, 30.586. Lowest, 28.946, on Dec. 9. Mean for the day, 29.175.
October	29.831	30.185	29.453	0.732	55.2	77	34	43	47.0	68.5	26.9	41.6	.348	.61	3.416	S. 88½° W., 70-100	
November . . .	29.948	30.228	29.330	0.898	43.3	67	23	39	39.4	58.1	13.2	44.9	.266	.60	2.022	N. 64° W., 43-100	
December . . .	29.919	30.445	28.946	1.499	37.5	60	13	47	30.1	57.3	15.1	42.2	.182	.66	5.006	N. 77° W., 47-100	
Annual means 1855	29.872	30.610	28.946	1.664	54.5	95	—1	96	44.2	78.5	—2.0	80.5	.363	.60	44.653	N. 63½° W., 39-100	
Annual means 1854	29.913	30.518	29.158	1.360	54.43	100½	6	94½	43.98	72.07	12.0	60.7	..	..	45.23	N. 77° W., .378	

According to these observations, we learn that the mean temperature of the year was 54.5°, being 2.1° above the average for thirty years, and 0.38° below the mean for 1854. The maximum was 95, while the minimum was —1°, or one degree below zero. The range of the thermometer, therefore, was 96°.

The coldest month in the year was February, when the mean of the mercury in the tube was 26.7°. The coldest day of this month, and which was the coldest of the year, was on the 6th, when the mean of the thermometer was 4½°, although on the following day, the 7th, the mercury stood at one observation 1° below zero, still the mean of the day was 5¼°.

The hottest month throughout the year was July, the mean of the temperature being 79.7°. The warmest day, however, was on the 30th of June, when the mean heat was 88¾°, but on the 19th of July, the thermometer stood at one time as high as 95°, while the mean of that day was 88°.

The indications of the barometer gave the mean pressure of the atmosphere for the year as 29.872. The maximum, 30.610. The minimum, 28.946. The range, 1.664.

On the 8th day of January, the mean of the barometer was 30.586, but during the day it was up to 30.610, the highest point gained in the year. The mean of this month (January), was 29.971, or less 0.11, than the mean of September, which was 29.982, showing the highest mean over any month for the year.

The lowest point to which the mercury fell in the barometer, was 28.946, on the 9th of December. The mean for that day was 29.175. The lowest mean for any one month was 29.739 in June.

The average dew-point for the year, as calculated by Prof. Kirkpatrick, by substituting the force of vapor, existing in the atmosphere, and the relative humidity or percentage of moisture when compared with complete saturation, both of which he obtains by the indications of the wet bulb or *August's Psychrometer*, for the usual mode of obtaining the dew-point directly,[1] will be found as 44.2. the force of vapor .353, and the relative humidity of the atmosphere for the year 60′. These observations were made at 2 P M., daily.

[1] See Medical Examiner for September, 1855, and January, 1856, for an account of this process.

The amount of rain and snow that fell during the year was equal to 44.653 inches. The greatest quantity in any one month was 8.008 inches, in June; in any one day 2.835, on July 20th. The least gauge of rain for any month, was found to be in March, 1.979 inches.

It will be seen in reviewing the annual means for 1854, and comparing them with those of 1855, that the latter has been more favorable in point of temperature, moisture and rain.

The preparation and preservation of the mortuary statistics of our city, cannot be too highly estimated.

In collecting and collating them for future reference, out of the returns entered at the Health Office, we have endeavored, in preparing the transcript, to observe much care, in order to have a faithful record. In some instances we may differ slightly in the enumeration of diseases, and in the figures, when compared with the published weekly reports during the year, but as our tables have been taken from the original copy in the office, and as we have occasionally detected inaccuracies in the published statements, we claim to have a more exact record.

It will be seen that we have not presented a weekly analysis of the deaths, as heretofore has been done. In its place we have prepared full monthly tabular statements; one of which embraces the diseases for each month, in both sexes, while the other furnishes the monthly aggregate of deaths at sixteen distinct periods of life. This arrangement we conceive to be altogether preferable, more convenient in collating tables for a series of years, and in conformity with the plan pursued by a majority of staticians.

It is much to be lamented that our own State falls so far behind some others, in the facilities which are afforded by legislative enactments, for collecting elaborate mortuary statistics. In the absence of a model registration system of births and deaths, the vital statistics of Philadelphia must, indeed, ever be, very imperfect and unsatisfactory. Nor do we hesitate to say, considering their present palpable defects, that they can never add much to the domain of medical science, nor greatly advance sound principles of political economy, either by aiding the calculations for the probabilities of human life, or for determining the value of annuities.

It is true, however, and it is due to the character and intelligence of this college, where it originated, to assert, that a Registration bill did pass through our legislature and become a law. But from the lukewarmness of the profession throughout the State, to favor its operations, owing, it is believed, to certain stringent sections it contained, as well as to the suspicion in another quarter that, to carry it out effectually, would draw from the State treasury several thousand dollars annually, it became a dead letter on the statute book, and before an opportunity was presented to remodel its objectionable features, and to prove its usefulness, it was repealed.

We cannot, however, for one moment, entertain the thought that this retrograde movement will long continue to remain a blot upon our medical character in Pennsylvania. That the absence of a registration law, by its recent repeal, will arouse the profession to a higher appreciation than ever, of the importance of correct and full vital statistics, and urge upon them a renewed and persevering effort to have the bill re-enacted, in a form so modified as to meet the approbation of all, both in and out of the profession, who have hitherto opposed its salutary and sanitary provisions.

The entire population of the county of Philadelphia in 1850, without respect to color, was, according to the United States census, 408,762. Of this number, 196,391 were males, and 212,371 females; showing an excess of female population of 3.90 per cent. Of the above total, the whites constituted 389,001, or 95.14 per cent., while the blacks were 19,761, or 4.83 per cent.

Adopting the above aggregate of population as the basis, or starting point, and adding thereto, in geometrical proportions 4 per cent. for every year since, which ratio of increase may be considered a fair augmentation of the population of cities; the growth for five years will give us 88,557, to which add 12,681, as an allowance for the usual excess of population from year to year, for the above period, and it will enable us to represent our population at this time as 500,000, which is no exaggerated estimate.[1]

[1] The Geographer, Darby, who computed the increase of the population of the United States, from 1790 to 1850, at 3 per cent. per annum, arrived at results, which, when compared with the census years, were, in every instance save one, below the

Since the organization of our municipal government, in July 1853, under the Act of Consolidation, our geographical limits as a city, include the entire county, which contains 120 square miles. This entire extent of territory is represented in the Board of Health, and all cemeteries located therein are compelled by law to make returns of their interments, at the office of the Board of Health, at the end of each week. At the present time, returns are received from ninety burial grounds, both public and private, which number we are assured, comprises, with scarcely an exception, all places of interment within the limits of the corporation.

The entire mortality for the year 1855, as reported to the Board of Health, is 10,457, which is less by 1327, or 5.96 per cent. than the aggregate number of deaths for 1854.

Of the total of deaths, 5545 were males, and 4912 females. This estimate presents the usual excess of mortality in males, as shown by the mortuary statistics of large cities; equal in this instance to 6.13 per cent.

By deducting the number of stillborn children (588) from the total mortality, the aggregate of deaths for the year is reduced to 9869, and by making this reduction they stand 1381 less than those for 1854, exclusive of the stillborn.

The aggregate mortality within the first year of life, was 3247, or 31 per cent. of the whole number of deaths. Between one and two years, 1094: between two and five years, 939. Total, under five years of age, 5280, or 50.48 per cent., and 5.25 per cent. less than those within the same period for 1854. Excluding the stillborn, will give 4692 or 47.53 per cent. of the whole mortality.

census figures, which gives the increase 8.17 per cent. per annum. We have fixed the rate at 4 per cent., as, perhaps, the most reliable standard for our city, although it is, as it should be, above that allowed by the census, for the growth of the entire population of the States, from 1840 to 1850, which ratio is assumed for the next decade, and which was in the aggregate 35.87 per cent. The increase of our city population for the decennial period from 1840 to '50, was equal to 58½ per cent., calculating at this rate or 29¼ per cent., for the last five years, up to 1855, would give us a population of 528,324; but, inasmuch as immigration has fallen off considerably, and as we have no reason to believe that the increase could be as rapid as it was for the previous years, from 1840 to 1850, we deem it safer to estimate under, than over the true population, in making what is altogether a speculative computation.

Within the 20th year, exclusive of stillborn children, there were 5558 deaths or 56.31 per cent. of the mortality. Beyond this period, or among the adult population, there were 4311 deaths, equivalent to 43.79 per cent. of the whole. Of this number 581 or 5.99 per cent. were between 70 and 90. Forty-nine between 90 and 100, and seven were centenarians; one of whom had lived beyond her 110th year.

Included in the aggregate mortality will be found 759 from the Blockley Almshouse, 558 blacks, and 134 from the country. According to these totals, the almshouse furnishes 7.15 per cent. and the colored population 5.62 per cent. of the deaths for the year. The deaths from the country numbering 134, do not belong to the city mortality, although it has been usual to include them.

In order to obtain a more definite estimate of the health of our city, or of the deaths from accredited diseases alone, it will be necessary to exclude all those reported under the following heads:—

Casualties	130
Burns and scalds	37
Concussion of the brain	3
Exposure	7
Drowned	106
Poisoning	3
Strangulation	2
Suffocation	14
Suicide	27
Violence	2
[1]Country, from the	134
Debility	393
Fracture	13
[1]Malformation	43
Old age	173
Stillborn	588
Unknown	220
Deducting this aggregate of	1895

[1] We have added to the above list of incidental causes, the deaths from malformation, and also those brought from the country. The former properly belong to the catalogue, while the latter, although occasioned by diseases, not having died within the city, deserve a place among the exclusives.

from the total mortality (10,457) will leave 8562 deaths charged to distinct diseases. This net number is less by 1267 than those reported for 1854. By an examination of the quarterly record of deaths, it will be found that 1144, or 90 per cent. of this decline in mortality for '55, is accounted for in the third quarter.

The accompanying table presents comparative estimates of the aggregate of the deaths for a period of five years, from 1850, with the increase or decrease in each year, in proportion to the entire population, and to every thousand of the population; together with the stillborn children and their percentage to deaths in each year. We have also appended the mean of the thermometer and the amount of rain that had fallen in each year.

Year.	Aggregate population.	Aggregate mortality.	Still-born children.	Deaths to population.	Deaths to every 1000 of population.	Per cent. of still-born to deaths.	Mean of thermometer.	Mean inches of rain.
1850	408,762	8,488	453	1 in 48.27	20.77	5.33	55.31	59.544
1851	425,112	8,871	470	1 in 46.78	20.87	5.29	54.00	35.50
1852	442,116	10,155	500	1 in 43.53	22.97	4.92	53.55	45.749
1853	459,800	9,711	571	1 in 47.34	21.15	5.87	54.56	40.657
1854	478,192	11,815	534	1 in 40.47	24.70	4.52	54.75	40.180
Average	442,796	9,808	505	1 in 45.27	22.09	5.18	54.44	44.236

From this statement it will be seen that during the five years from 1850 to 1854, inclusive, while the death rate has increased numerically, it has observed no regularity in proportion to the increase of population.

By comparing the annual mortality of one year with another, we find that in 1850, '51 and '53, the deaths were fewer, contrasted with the population, than in 1852 and '54.

So, likewise, the death rate for each thousand of the population was 20.77 in 1850; and 20.87 in 1851; 21.15 in 1853—whereas, it shows an increase in 1852, when it stood at 22.97, and in 1854 when it was 24.70.

This table also shows the average mortality of the quinquennial period from 1850 to 1854, inclusive, to be 9808. The mortality to population, 1 in 45.27, and 22.09 to every thousand.

During the same period, the stillborn children steadily increased for four years, from 453 in 1850, to 571 in 1853; but in 1854 they stood 534, less by 27 than the previous year.

The average for the five years was 505 or 19.42 to the mortality, equivalent to 5.18 per cent.

The range of the thermometer for the above period, was from 53.55 in 1853 to 55.31 in 1850. The greatest amount of rain that fell in any one year, was 59.544 inches, in 1850, and the smallest amount was the next year 1851, only 35.50 inches, which was less than for the twenty-five preceding years, except in 1834 when 35.50 also fell, and in 1848, when there was only 34.98 inches.

According to the evidence furnished in the above table of deaths, for the term of years between 1850 and '54, inclusive, the proportion of deaths to population has been lower than for the preceding decennial period; when it was 1 in 41.15 or 25.44 in every thousand of the average population. The last five years give the death rate to population as 1 in 45.27 and for each thousand 22.09, presenting a favorable contrast with the former term.

The mean temperature for the five years, according to the observations kept at the hospital, by Dr. Conrad, was 54.44, which is 2.40° above the mean for sixty years.

The average quantity of rain that fell during the five years, was 44.236 inches, a fraction over the average for 60 years.

The deaths from diseases of the lungs and air-passages, excluding hooping-cough, were 2,586, or 26.20 per cent. of the total mortality.

The following table will give the deaths for each quarter of the year. Also the aggregates and percentages to total mortality for those of 1850, '51, '52, '53, and '54.

From this statement it will appear that the deaths from diseases incident to the lungs and air-passages, for 1855, have not varied materially, in the aggregate, from those of 1854; although there is a slight falling off in those of 1855. The greatest reduction in any one disease, is in consumption of the lungs, and here it is only 1.88 per cent. less than the mortality for 1854. This difference, however, may be purely incidental, as it can hardly be accounted for from any influence upon health occasioned by the meteorological condition of the seasons.

Hooping-cough, which is merely appended to this group of diseases (as adopted in former years), has declined 26.52 per cent.

from the mortality of that of 1854; during which period, however, there had been a large increase over those of 1853, amounting to 41.55 per cent.

During the first quarter of the year including January, February, and March, the following diseases appear to have been peculiarly fatal: asphyxia, asthma, congestion of the lungs, consumption of the lungs, croup, disease of the lungs, dropsy of the chest, hemorrhage of the lungs, inflammation of the bronchi, lungs and pleura. Hooping-cough, however, proved to be most fatal during the third quarter, July, August, and September, in which period, 44, or nearly half of the deaths for the year occurred. This was not peculiar. According to the tables prepared for the college, the five previous years, it will be seen that the highest rate of mortality for hooping-cough is in the third quarter of each year, except in 1852, when the deaths for the entire year were only sixteen.

Mortality from Diseases of the Lungs and Air-passages.

	ANNUAL AGGREGATES.						QUARTERS OF 1855.			
	1850.	1851.	1852.	1853.	1854.	1855.	1st.	2d.	3d.	4th.
Abscess, pulmonary	12	15	16	9	9	9	1	5	2	1
Angina pectoris	...	...	8	11	4	5	2	1	1	1
Asphyxia	17	20	28	38	22	28	8	6	7	7
Asthma	18	11	14	14	29	19	5	5	4	5
Congestion of the lungs	58	68	62	46	64	82	37	19	12	14
Consumption, laryngeal	...	9	3	1	...	1	...	...	1	...
" of the lungs	907	881	1182	1246	1378	1327	377	331	309	310
Croup	143	180	187	295	259	265	89	51	38	87
Disease of the chest	...	2	10	7	9	10	...	...	8	2
" lungs	32	28	21	34	42	33	12	10	5	6
Dropsy of the chest	63	62	46	46	32	48	15	15	9	9
Effusion on the chest	...	6	10	9	6	3	1	...	...	2
" lungs	4	1	4	3	4	7	2	5	...	...
Emphysema	...	3	...	1	2	...	...	...	...	...
Empyema	2	2	1	1	1	...	...	...	...	...
Gangrene of the lungs	...	6	2	1	3	1	...	1	...	...
Hepatization of the lungs	...	1	1	...	...	...	...	...	...	...
Hemorrhage from the lungs	24	29	22	28	26	21	3	5	6	7
Influenza	...	6	8	2	3	4	...	3	1	...
Inflammation of the bronchi	191	175	207	195	244	233	89	75	24	45
" " chest	...	...	14	12	7	10	7	...	...	3
" " larynx	23	25	21	19	16	13	2	6	3	2
" " lungs	352	352	438	346	435	442	174	137	60	71
" " pleura	11	9	11	15	21	24	10	8	2	4
" " trachea	...	1	...	...	...	1	...	1	...	...
Totals	1850	1892	2316	2374	2616	2586	834	684	492	576
Hooping-cough	117	122	16	64	155	90	18	10	44	18
Totals	1967	2014	2332	2438	2771	2676	852	694	536	594
Total mortality, exclusive of stillborn	8025	8401	9655	9140	11281	9869				
Per cent. from diseases of lungs	23.05	22.50	23.98	25.97	23.18	26.20				
Per cent. from consumption of the lungs	11.30	10.48	12.13	13.74	12.21	13.45				

In addition to the usual table of deaths from diseases of the lungs and air-passages, we have prepared one of the annual mortality, from consumption of the lungs, in which will be seen at a glance, the number of deaths for each month, with the sexes designated; together with those at fifteen distinct periods of life.

A comparative examination of this statement will show that consumption of the lungs contributed 1327 towards the aggregate of deaths for the year, equal to 13.45 per cent. (stillborn excluded).

This calculation gives 1.24 per cent. more than did the deaths from consumption in 1854, to the aggregate mortality; at the same time the numerical mortality for 1855 was less than that for '54 by 1.88 per cent.

The death rate to population from consumption, was as 1 in every 376.03. In every thousand of the population, it is rated 2.65.

Consumption of the lungs furnishes more than one-half, or 51.31 per cent. of the entire mortality from diseases of the lungs and air-passages.

Every period of life, from infancy to old age, contributes subjects for this disease. Of those who died under 20 years, there were 239; thirty-six of these were under one year of age! That period of life between 20 and 30 furnished the largest number of any other decennary, amounting to 427. Forty were beyond 70 years of age. Early manhood, or those ages included between 15 and 50, appears to have been most liable to consumption. Within this range, 1015 of the deaths occurred, equal to 76.48 per cent. of the whole.

The highest mortality for the quarterly returns of the year, will be found in the 1st, January, February, and March, amounting to 377. The lowest 309, was in the third quarter, July, August, and September; but the heaviest mortality for any single month was in May, during the second quarter, viz: 144, or at the rate of 4⅔ deaths daily.

The monthly mortality from consumption, in numerical order, was as follows: May 144; March 137; August 129; October 124; April 110; February 108; December 105; July 97; September 83; November 81; and June 77.

The excess of deaths in the sexes was among females, equal to 4.89 per cent.

Tabular Statement of the Mortality from Consumption of the Lungs, during each Month of the year 1855, *at fifteen distinct periods of life, with the Sexes designated for each month.*

AGES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Under 1 year	3	2	2	...	7	6	6	4	1	1	2	2	36
From 1 to 2 years . .	3	2	3	2	1	...	1	2	...	...	...	1	15
" 2 to 5 " . .	2	3	3	3	3	2	4	1	2	1	3	2	29
" 5 to 10 " . .	3	...	2	1	2	3	...	...	1	1	3	1	17
" 10 to 15 " . .	...	3	3	2	3	1	2	2	2	2	...	1	21
" 15 to 20 " . .	10	5	13	8	10	7	9	11	8	15	11	14	121
" 20 to 30 " . .	49	34	49	32	49	21	33	44	29	31	25	31	427
" 30 to 40 " . .	33	26	29	28	26	13	16	29	19	37	16	21	288
" 40 to 50 " . .	14	10	17	22	13	15	14	23	13	18	13	7	179
" 50 to 60 " . .	7	10	9	8	13	4	5	7	3	7	5	14	92
" 60 to 70 " . .	5	6	5	7	9	4	2	4	5	7	3	9	66
" 70 to 80 " . .	1	5	1	2	4	1	5	2	...	3	...	1	25
" 80 to 90 " . .	2	2	...	...	4	...	...	...	...	1	...	1	10
" 90 to 100 " . .	...	...	1	...	...	...	...	...	...	...	...	...	1
" 100 to 110 " . .	...	...	...	...	. .	...	...	...	...	...	...	...	...
Male	68	60	68	51	72	44	47	60	48	53	29	41	631
Female	64	48	74	59	72	33	50	69	40	71	52	64	696
Monthly totals	132	108	137	110	144	77	97	129	88	124	81	105	...
Quarterly totals	377			331			309			310			1327

From diseases peculiar to the nervous system, there have been 1866 deaths for the year, equal to 18.90 per cent. of the whole mortality. This calculation does not include either puerperal convulsions, or puerperal mania.

In this class of diseases are embraced a large proportion of children. Of the four diseases numbering the highest in the table, viz: congestion of the brain, convulsions, dropsy of the brain, and inflammation of the brain, amounting in the aggregate to 1343; twelve hundred and nineteen were in children, equal to 65.28 per cent. of the mortality from diseases of this class. Convulsions alone make up nearly one-third of all the deaths, or 32.63 per cent.

The annual aggregates, for five years preceding 1855, are also presented in this table. From which estimates, it will be observed that the deaths for 1855 are less by 276, or 12.88 per cent. than those for 1854; while they are 18.22 per cent. above the average of those for the preceding four years.

Mortality from Diseases of the Nervous System.

	ANNUAL AGGREGATES.						QUARTERS OF 1855.			
	1850.	1851.	1852.	1853.	1854.	1855.	1st.	2d.	3d.	4th.
Abscess of the brain	...	5	3	4	4	2	1	...	1	...
Apoplexy	97	85	91	112	111	110	26	35	24	25
Atrophy of the brain	...	...	2	...	...	...	...	...	...	...
Chorea	...	3	2	...	2	...	...	...	...	...
Catalepsy	...	...	1	...	...	...	...	...	...	...
Coma	...	...	...	...	...	2	...	...	...	2
Compression of the brain	5	6	1	7	1	3	...	2	1	...
Concussion of the brain	...	...	...	...	...	1	...	...	...	1
Congestion of the brain	97	130	124	158	207	175	44	34	57	40
Consumption of the brain	...	2	1	...	...	...	...	...	...	...
Convulsions	444	479	483	530	727	626	131	151	212	132
Disease of the brain	88	74	99	75	87	97	27	25	29	16
Dropsy of the brain	283	245	286	190	293	254	78	55	75	46
Effusion on the brain	74	78	93	84	93	72	17	14	29	12
Epilepsy	14	28	23	19	17	25	5	7	8	5
Inflammation of the brain	218	302	254	156	361	288	72	78	87	51
" " tympanum	...	...	...	...	...	1	...	...	...	1
Insanity	...	4	1	...	2	1	...	1	...	...
Irritation of the brain or spinal marrow	...	1	...	2	2	1	1	...	...	...
Mania	4	7	18	6	14	16	4	8	3	1
Mania à potu	54	64	52	66	56	25	9	5	6	5
Neuralgia	5	3	2	5	3	1	...	...	...	1
Palsy	71	50	77	65	92	106	30	33	25	18
Softening of the brain	10	28	16	14	19	20	4	6	7	3
Spinal meningitis	...	...	2	...	1	...	...	...	...	...
" ramollissement	...	1	...	...	...	...	...	...	...	...
Teething	23	16	12	19	30	16	2	3	11	...
Tetanus	11	15	7	10	15	17	2	5	6	4
Trismus	...	5	4	6	5	3	...	2	4	2
Totals	1499	1531	1596	1483	2142	1866	452	464	585	365
Puerperal convulsions	...	9	16	9	13	15	3	1	4	2
" mania	...	1	6	5	14	2	2	...	...	...
Totals	1499	1541	1618	1497	2169	1883	462	465	589	367
Total mortality, exclusive of stillborn	8025	8401	9655	9140	11281	9869				
Per cent. of total mortality	18.69	18.34	16.53	15.72	17.21	18.90				

The following table gives a statement of the deaths from diseases of some of the organs of nutrition, numbering 2196, or 22.35 per cent. of the entire annual mortality. This total shows a considerable abatement compared with those for 1854, amounting to 1081, or 32.75 per cent.

This unusual reduction will at once be attributed to the almost entire absence of cholera asphyxia, from our city, during the past summer, as well as to the falling off in the deaths from cho-

lera infantum, cholera morbus, diarrhœa, and dysentery, amounting in the aggregate to 1037.

While the deaths from cholera infantum have been less by 22.78 per cent. than those for 1854, they are higher by 51.33 per cent. than the average for the three preceding years, and 10.77 per cent. above those for 1850.

For the last year, 1855, they amounted to 566, or 5.62 per cent. of the entire mortality.

In this table we have given the total of deaths, with per centages, from these diseases for the five previous years.

Mortality from Diseases of some Organs of Nutrition.

	ANNUAL AGGREGATES.						QUARTERS OF 1855.			
	1850.	1851.	1852.	1853.	1854.	1855.	1st.	2d.	3d.	4th.
Abscess	14	20	8	20	20	17	1	3	5	8
" abdominal	...	1	1	1	1	1	1	...	...	...
" of the liver	3	3	7	3	9	2	...	1	...	1
Cancer of the pylorus	1	1	2	...	1	...	...	...	...	...
" stomach and bowels	24	13	14	15	22	18	5	5	3	5
Cholera	6	...	...	2	591	33	2	...	27	4
" infantum	505	397	330	395	733	566	5	19	527	15
" morbus	24	28	45	19	127	29	...	7	22	...
Cirrhosis of the liver	...	8	7	7	11	7	3	3	...	1
Colic	5	7	9	5	3	8	1	2	3	2
Colica pictonum	2	2	...	...	1	...	...	...	...	...
Constipation	...	1	1	...	2	2	...	...	...	2
Consumption of the bowels	...	1	4	13	6	4	2	2	...	...
Diarrhœa	208	157	154	130	214	177	26	25	100	26
Disease of the liver	26	13	21	18	26	25	4	8	8	5
" stomach and bowels	29	19	27	20	14	20	8	7	2	3
Dropsy	116	123	123	148	115	110	42	29	39	...
" abdominal	28	29	41	22	59	31	7	7	9	8
Dysentery	421	401	537	374	442	266	28	27	184	27
Dyspepsia	2	2	3	2	5	1	...	1	...	...
Gout	2	5	3	3	2	4	2	...	...	2
Icterus	17	17	15	24	29	27	10	2	11	4
Ileus	8	3	1	3	2	4	...	...	3	1
Inflammation of the liver	37	34	39	28	32	38	13	9	11	5
" peritoneum	62	60	70	62	52	54	19	17	7	11
" stomach and bowels	187	187	233	260	173	187	31	43	78	35
Intussusception	...	...	7	3	3	7	2	3	2	...
Marasmus	217	255	246	373	447	436	82	72	209	73
Obstruction of the bowels	8	8	8	9	10	13	2	3	3	5
Scrofula	57	48	68	56	46	54	11	14	15	14
Tabes mesenterica	25	45	45	37	35	28	6	8	14	...
Tuberculosis	16	18	33	18	24	6	6	...	...	...
Ulceration of the stomach and bowels	19	16	21	16	20	21	4	4	7	6
Totals	2064	1917	2023	2086	3277	2196	323	321	1289	263
Total mortality, exclusive of stillborn	8025	8401	9655	9140	11281	9869				
Per cent. of total mortality	23.00	21.34	20.95	22.82	28.96	22.35				

The diseases of the urino-genital system, as collated in the annexed table, have amounted to 148. Of these, 84, or more than one-half, perished as follows: From puerperal fever, 41; puerperal convulsions, 15; hemorrhage from uterus, 13; inflammation of uterus, 8; child-bed, 2; puerperal mania, 2; rupture of the uterus, 3.

It becomes a source of regret that we have no direct means of acertaining what proportion of the above deaths was connected with parturition. The careless and indefinite character of physician's certificates, renders it impossible to define what relation the deaths, under the head of the urino-genital system, bore to lying-in women. Those from puerperal fever, puerperal convulsions, child-bed, and puerperal mania, amounting to 60, we have no hesitation in according to the parturient state. By computation, this would give one death in every 2½ of this class, or 40.54 per cent. If we base the calculation on 84, which we believe would be a nearer approximation to a correct data, it would give 56.75 per cent.

Following out the latter estimate, and allowing that the excess of female population, over that of the males, to prevail at this period as in 1850, when, according to the census it was 3.90 per cent., the proportion of females to population would be 255,906. This calculation, estimating the deaths to have been 84, would furnish only 1 death among parturient women to every 3046 of the female population.

If, in accordance with the ratio of births, to population in Pennsylvania, as laid down by De Bow, in his "United States Statistics, for 1850," which he makes 2.78 per cent., there were 13,000 births for 1855, in this city,[1] the proportion of deaths among parturient women would have been as one in every 154½, or 0.64 per cent.

[1] The returns of births have not been made to the Health Office for 1855; nor have they been published since 1851, when they were 11,193.

Mortality from Diseases of the Utero-Genital Organs.

	ANNUAL AGGREGATES.						QUARTERS OF 1855.			
	1850.	1851.	1852.	1853.	1854.	1855.	1st.	2d.	3d.	4th.
Abortion	...	1	1	...	...	...	...	...	...	...
Albuminuria	...	...	...	2	6	6	...	2	3	1
Amenorrhœa	...	...	...	1	...	...	...	...	...	...
Cancer of mammæ	7	11	11	26	8	7	1	3	2	1
" uterus	18	17	11	11	15	18	7	5	6	...
Childbed	4	7	1	15	8	2	2	...	...	...
Chlorosis	...	...	2	2	...	1	...	...	...	1
Convulsions, puerperal	8	9	16	9	13	15	8	1	4	2
Disease of the bladder	...	1	1	3	...	1	1	...	...	...
" kidneys	9	8	9	8	12	3	1	2	...	...
" ovaries	1	1	...	...	3	3	3	...	...	...
" prostate gland	...	1	1	...	...	1	...	1	...	...
" urinary organs	1	1	2	2	...	...	...	...	...	...
" uterus	...	1	2	4	4	3	1	1	...	1
Dropsy, ovarian	3	2	3	1	1	1	...	1	...	...
" of uterus	...	...	...	1	...	...	...	...	...	...
Enlargement of prostate	...	1	1	2	...	...	...	...	...	...
Fever, puerperal	30	41	48	26	25	41	15	20	...	6
Hemorrhage from uterus	11	12	10	18	16	18	3	3	6	1
Inflammation of the bladder	2	10	9	9	6	5	1	2	1	1
" " kidneys	6	4	9	6	4	4	2	1	...	1
" " prostate	...	2	...	...	...	1	...	...	...	1
" " uterus	8	16	19	9	8	8	2	2	3	1
Mania, puerperal	...	1	6	5	2	2	2	...	...	...
Menorrhagia	...	...	1	...	1	...	...	...	...	...
Orchitis	...	...	1	...	...	...	...	...	...	...
Rupture of the bladder	...	1	...	...	...	1	...	1	...	...
" urethra	...	...	...	1	...	1	...	...	...	1
" uterus	2	...	1	4	1	3	...	...	2	1
Stone	...	...	2	1	1	1	...	1	...	...
Stricture of the urethra	...	1	...	3	...	...	...	...	...	...
Strangury	...	...	2	...	...	...	...	...	...	...
Syphilis	...	5	6	7	4	4	1	1	2	...
Tumor, ovarian	...	1	4	...	2	2	...	...	1	1
Ulceration of the bladder	...	2	...	...	...	...	...	...	...	...
" urethra	...	...	1	...	...	...	...	...	...	...
" uterus	...	1	1	...	1	1	1	...	...	...
Totals	110	158	176	171	141	148	51	47	30	20

In the accompanying tabular form will be found the deaths from fevers, for 1855; amounting in all to 628, or 6.30 per cent. of the mortality. This estimate is 1.18 per cent. higher than the percentage of fevers for 1854, at the same time the numerical mortality from fevers in 1855, is actually 4.14 per cent. less than that for '54. For the previous five years, taking the average mortality from fevers, which would be, 791, the deaths from fevers in 1855 will be found 12.35 per cent. less. The conclusion there-

fore, is correct, that the deaths from fevers in 1855, have been less by 12.35 per cent. than for the five previous years.

The great increase of deaths from typhoid fever over those of every other type, as well as its steady increase in ratio, from year to year since 1850, will not escape the observation of the fellows of the college. Nor can we be mistaken in our inference after an examination of other mortuary tables, that this form of fever is becoming far more prevalent, if recorded statistics are to be relied upon, than it was a few years since. The true cause for this increase would prove an interesting subject of medical investigation.

The deaths from scarlet fever were 163, showing an increase of only two, over those for 1854. The average of deaths from this disease for the four years preceding 1854, was 410, while for the last two years it was 162, or 43.53 per cent. less.

That period of life most favorable to an attack of scarlet fever, appears to be, between two and five years. One hundred and fifty of the deaths were under ten, and only one over twenty years of age.

A large increase of deaths from scarlet fever will be noticed to have taken place during the fourth quarter of the year, running up from 26 to 66, nearly treble those for the third quarter.

Three deaths from yellow fever are recorded, all of which were in individuals who contracted the disease in Norfolk, Virginia.

Mortality from Fevers.

	Annual aggregates.						Quarters of 1855.			
	1850.	1851.	1852.	1853.	1854.	1855.	1st.	2d.	3d.	4th.
Fever	32	25	30	18	16	16	6	2	6	2
" bilious	15	2	8	47	22	36	2	12	11	11
" catarrhal	8	...	1	...	...	...	...	...	...	...
" cerebral	...	2	4	1	1	2	2	...	...	...
" congestive	17	10	15	9	9	7	...	1	3	3
" continued	3	2	...	3	3	1	1	...	...	...
" gastric	...	1	2	1	...	4	...	...	...	4
" hectic	5	4	6	8	5	4	1	...	1	2
" intermittent	15	7	5	12	8	7	1	1	3	2
" inflammatory	...	...	1	...	...	...	...	...	...	...
" malignant	...	...	...	52	3	2	...	...	1	1
" nervous	1	...	2	2	5	2	...	...	1	1
" pernicious	...	...	...	2	...	2	...	...	2	...
" puerperal	30	41	43	26	25	41	15	20	...	6
" remittent	35	37	36	45	45	48	9	5	15	19
" scarlet	439	400	419	384	161	163	36	35	26	66
" synocha	...	...	3	...	...	...	...	...	...	...
" typhoid	105	127	131	198	182	231	55	39	59	78
" typhus	69	88	154	155	81	59	13	13	23	10
" " abdominalis	...	...	...	2	...	...	...	...	...	...
" " icterodes	...	...	...	14	...	...	...	...	...	...
" yellow	...	...	...	26	12	3	...	...	2	1
Totals	769	746	861	1005	578	628	141	128	153	206
Total mortality, exclusive of stillborn	8025	8401	9655	9140	11281	9869				
Per cent. of total mortality	9.50	8.87	8.71	10.99	5.12	6.30				

The deaths from measles, for 1855, are herewith presented in a separate table, together with the aggregates for the five previous years.

From this table it will be seen that the deaths from measles have declined more than one-half since 1854. If we examine the annual aggregates in this table, since 1850, they will show an annual uniformity of increase and decrease for alternate years, as follows: from 69, in 1850 to 16, in 1851; from 90, in 1852 to 12 in 1853; and from 57, in 1854 to 24, the number for 1855. Whether this regular order of recurrence is merely a coincidence without a principle, we do not determine.

Mortality from Measles.

	ANNUAL AGGREGATES.						QUARTERS OF 1855.				Total for six years.
	1850.	1851.	1852.	1853.	1854.	1855.	1st.	2d.	3d.	4th.	
Measles	69	16	90	12	57	24	11	9	...	4	268

The following table will give the deaths from smallpox for each month in the year, and for fifteen gradations of life, to which we have appended the deaths from varioloid. We have also given the annual aggregates for the five previous years.

This table shows that, during the year, smallpox has contributed 281 deaths, and varioloid 24, in all 305, to make up the annual mortality. This is an increase over those for 1854 of 76.30 per cent.

The monthly mortality, according to this record, appears to have increased slowly, but steadily, until late in the year, when it suddenly ran up from 39 in November, to 67 in December.

Infancy, it will be perceived, has suffered severely; of those under ten years of age it carried off 221, equal to 72.45 per cent. Eighty-eight of these deaths, or 28.85 per cent. of the whole number, were between 2 and 5 years, and fifty-eight, or 19.01 per cent. were under one year of age.

The excess of deaths was, with the males, to the amount of 13.11 per cent.

Of the 24 cases of death from varioloid, says the record, twenty-one were in children under ten years of age; nine of whom were within the second year, and of these, six were under one year.

If this record be reliable, we must draw the inference that varioloid, or modified smallpox, is peculiarly fatal to young children. (?)

It becomes a question, however, and one that we are not prepared to discuss in this report, whether the deaths in children reported under the head of varioloid, were not in reality smallpox, without modification. We have always entertained the opinion, that varioloid is not only a very mild disease, but that young children are seldom its subjects.

Mortality from Smallpox and Varioloid, during the year 1855, *with the Sexes and Ages.*

Ages.	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual aggregates.					
	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Small-pox.	Vario-loid.	Total small-pox.	Total vario-loid.	1850.	1851.	1852.	1853.	1854.
Under 1 year	4	...	7	...	2	1	1	...	4	1	5	...	4	1	3	...	2	...	4	2	6	...	16	1	58	6	...	...	...	...	...
1 to 2 years	1	...	2	...	1	1	4	...	4	...	2	...	...	...	4	...	3	1	5	...	6	...	7	1	39	3	...	...	...	...	...
2 to 5 "	3	...	3	...	5	1	3	2	8	1	5	...	7	...	7	1	5	...	9	...	12	1	21	3	88	9	...	...	...	...	...
5 to 10 "	...	...	4	...	2	...	2	...	2	...	2	1	2	1	1	...	7	1	2	...	5	...	7	...	36	3	...	...	...	...	...
10 to 15 "	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	1	1	...	1	...	1	...	6	1	...	...	...	...	...
15 to 20 "	1	...	1	...	1	...	...	...	...	...	1	...	1	...	2	...	...	...	...	...	2	...	1	...	10	...	...	...	...	...	...
20 to 30 "	...	...	1	...	1	...	...	...	4	...	1	...	2	1	2	...	...	...	1	...	1	...	7	...	29	1	...	...	...	...	...
30 to 40 "	...	...	1	...	...	...	...	...	...	...	2	...	2	...	...	1	...	...	1	...	3	...	3	...	12	1	...	...	...	...	...
40 to 50 "	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	3	...	7	...	...	...	...	...	...
50 to 60 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	...	...	4	...	...	...	...	...	...
60 to 70 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...
70 to 80 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80 to 90 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
90 to 100 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
100 to 110 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Males . . .	7	...	9	...	7	2	8	2	16	...	11	...	11	2	11	...	11	1	16	2	22	...	87	8	161	12	...	...	...	...	...
Females . .	2	...	11	...	5	1	7	...	7	2	8	1	8	1	8	2	9	2	8	...	17	1	30	2	120	12	...	...	...	...	...
Total smallpox	9	...	20	...	12	...	16	...	23	...	19	...	19	...	19	...	20	...	24	...	39	...	67	...	281	...	40	216	426	57	40
Total varioloid	...	...	...	...	...	3	...	2	...	2	...	1	...	3	...	2	...	3	...	2	...	1	...	5	...	24	1	8	11	...	1
Total . . .	9		20		15		12		25		20		22		21		23		26		40		72		305		41	224	437	57	41

The following table gives the annual aggregates for those diseases which have been most fatal during the past six years. No disease is named in this statement that did not exceed ninety, in number, during each of the years.

Causes assigned for Death where the number is 90 and upwards.

	ANNUAL AGGREGATES.						QUARTERS OF 1855.			
	1850.	1851.	1852.	1853.	1854.	1855.	1st.	2d.	3d.	4th.
Apoplexy	97	...	91	112	111	110	26	35	24	25
Casualties	...	...	...	...	...	102	31	22	49	...
Cholera	...	...	...	...	591	...	...	...	...	...
" infantum	505	397	330	395	733	566	5	19	527	15
" morbus	...	...	...	...	127	...	...	...	...	...
Consumption of the lungs	907	881	1182	1246	1378	1327	377	331	309	310
Congestion of the brain	97	130	124	153	207	176	44	34	57	40
Convulsions	444	479	483	530	727	626	131	151	212	132
Croup	143	180	187	295	259	265	89	51	38	87
Debility	201	260	341	387	465	393	104	99	118	77
Diarrhœa	208	157	154	130	214	177	26	25	100	26
Disease of the brain	...	...	99	...	...	97	27	25	29	16
" heart	101	98	124	110	141	170	51	50	35	34
Dropsy	116	123	123	143	115	136	42	29	39	26
" of the brain	283	245	236	190	293	254	78	55	75	46
Dysentery	421	401	537	374	442	266	28	27	184	27
Effusion on the brain	...	...	93	...	98	...	...	...	...	...
Erysipelas	...	...	91	...	...	...	...	...	...	...
Fever, scarlet	439	400	419	384	161	163	36	35	26	66
" typhoid	105	127	131	198	182	231	55	89	59	78
" typhus	...	...	154	155	...	...	...	...	...	...
Hooping cough	...	...	...	...	...	90	18	10	44	18
Inanition	...	106	91	...	...	104	28	28	37	21
Inflammation of the brain	218	262	254	156	361	288	72	78	87	51
" bronchi	191	175	207	125	244	233	89	75	24	45
" lungs	352	352	438	346	435	442	174	187	60	71
" stomach and bowels	187	187	233	260	173	187	31	43	78	35
Marasmus	217	255	346	373	447	436	82	72	209	73
Measles	...	...	90	...	...	...	...	...	...	...
Old age	185	186	189	135	191	173	55	47	34	37
Palsy	...	...	...	...	...	106	30	33	25	18
Smallpox	...	216	426	...	...	281	41	52	58	130
Stillborn	453	470	500	571	534	588	132	150	144	162
Unknown	147	141	270	218	319	220	57	58	62	43

An analysis of the annexed table will show that of the whole number of deaths (10,457), 5,545 were males, and 4,912 females; presenting an excess of deaths amongst males, amounting to 633, 6.05 per cent. In 1854, the excess was still greater, being 7.77 per cent.

It will be seen also, that of the 588 stillborn children, 336

were males and 252 females, showing an excess of males equal to 14.29 per cent., or more than double the excess of mortality in the male sex, at any decennial period of life.

Infantile mortality is largely represented in this table. Of the whole number of deaths, 3,245, or 31 per cent., were under one year of age; of these 588 were stillborn. The deaths previous to the fifth year amounted to 5,280, or 50.48 per cent., and before the twentieth year 6,146, or 58.76 per cent.

Of the deaths under five, amounting to 4,692 (exclusive of stillborn), there were 2,642, or 56 per cent.; a large majority of these took place in the summer and autumn months of July, August, and September, a period of the year peculiarly fatal to children.

From the first period of life (under one year), up to the fifth, 10 to 15, the deaths gradually decline. From this period they begin to increase, until they reach the seventh period, 20 to 30, when they fall off again gradually, up to the sixteenth, 110 to 120. Forty-nine, or 0.47 per cent. of the deaths were beyond ninety, six were between 100 and 110, and one was over 115 years of age.

The greatest number of deaths for any month was in August, 1,456, the next highest was in July, 1112. The lowest monthly mortality was in June, only 696; equal to 23 per day.

June furnished the highest number of stillborn children, 60, averaging two per day, while February produced the least, 36.

The Deaths, with the Sexes, for each Month in the Year, and the Number at Sixteen distinct Periods of Life—with the Stillborn Children for each Month, and their Sex.

MONTHS.	Males.	Females.	STILLBORN.			Under 1 year.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	110 to 120.	Total.
			M.	F.	Total.																	
January	450	417	31	21	52	228	81	69	22	20	24	120	85	51	52	47	40	21	7	...	...	867
February	387	380	16	20	36	225	83	75	26	11	17	89	70	34	81	55	29	15	7	...	...	767
March	481	411	30	14	44	234	85	82	43	13	34	107	76	55	47	48	45	18	5	...	...	892
April	398	371	27	15	42	199	69	76	33	12	16	86	69	70	53	41	28	16	1	...	...	769
May	491	418	24	24	48	231	81	81	42	13	29	108	83	61	57	44	50	24	3	1	1	909
June	379	317	33	27	60	232	46	55	36	10	18	59	59	51	41	33	36	16	3	1	...	696
July	595	517	30	24	54	507	120	64	32	15	29	76	81	54	52	40	25	13	4	...	...	1112
August	774	682	27	19	46	559	247	101	32	22	37	115	118	72	48	41	40	19	4	1	...	1456
September	440	378	26	18	44	248	116	80	33	12	23	83	61	55	27	35	25	13	6	1	...	818
October	468	399	37	22	59	238	58	92	37	9	34	85	101	64	41	54	35	17	...	2	...	867
November	312	275	31	25	56	171	49	62	29	8	21	65	62	40	39	21	13	5	2	...	...	587
December	370	347	24	23	47	175	59	102	40	11	23	72	65	42	49	34	24	14	7	...	...	717
Totals	5545	4912	336	252	588	3247	1094	939	405	156	305	1065	920	659	537	498	390	191	49	6	1	10457

TABLE OF MORTALITY FOR THE YEAR 1855.

Collated from Returns made to the Board of Health. By WILSON JEWELL, M. D.

	FIRST QUARTER, COMMENCING DECEMBER 30, 1854.									SECOND QUARTER, COMMENCING MARCH 31, 1855.								
	JANUARY.		FEBRUARY.		MARCH.		Adults.	Minors.	Total.	APRIL.		MAY.		JUNE.		Adults.	Minors.	Total.
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.			
Abscess	...	1	...	...	...	...	...	1	1	...	...	2	...	...	1	...	3	3
" abdominal	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
" lumbar	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
" of brain	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...
" breast	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
" liver	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
" lungs	...	...	...	1	...	...	1	...	1	1	1	...	2	...	1	3	2	5
" psoas	...	...	...	...	...	1	...	1	1	...	1	...	...	...	...	1	...	1
" thigh	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
Albuminuria	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	3
Anæmia	...	1	...	...	...	...	...	1	1	1	...	2	...	...	2	1	4	5
Aneurism	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
" of the aorta	2	1	...	...	...	...	2	1	3	...	...	...	...	...	...	...	...	...
Angina pectoris	1	...	...	...	...	1	2	...	2	...	...	...	...	...	1	1	...	1
Aphthæ	...	...	1	...	...	...	...	1	1	...	...	1	...	...	...	...	1	1
Apoplexy	6	7	5	2	8	3	25	1	26	6	5	4	8	7	5	35	...	35
Asphyxia	1	...	2	...	3	2	...	3	3	3	1	...	1	...	1	2	4	6
Asthma	...	1	2	...	...	2	5	...	5	...	...	1	3	...	1	2	3	5
Atrophy	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	4	4
Cachexia	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
Calculi, vesical	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
Cancer and scirrhus	1	1	...	...	1	...	3	...	3	...	...	3	2	1	...	6	...	6
" of the bladder	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
" " breast	...	...	...	1	...	...	1	...	1	...	2	...	...	...	1	3	...	3

Cancer of the kidneys	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
" " stomach and bowels	1	...	...	1	2	1	5	...	5	...	1	...	2	1	1	5	...	5
" " face	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
" " liver	...	1	1	...	...	...	2	...	2	...	...	...	...	...	1	1	...	1
" " tongue	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...
" " uterus	...	2	...	2	...	3	7	...	7	...	...	...	2	...	3	5	...	5
Cancrum oris	3	...	1	1	2	...	...	7	7	1	...	1	...	...	...	...	2	2
Caries of the spine	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Casualties	12	3	8	1	4	3	26	5	31	6	...	5	3	8	...	14	8	22
Burns and scalds	6	3	2	4	1	4	6	14	20	1	2	3	3	...	...	1	8	9
Concussion of the brain	1	...	...	...	1	...	2	...	2	1	...	...	...	...	...	1	...	1
Drowned	3	1	2	2	6	...	10	4	14	10	1	8	...	15	...	22	12	34
Exposure	...	...	1	...	1	1	3	...	3	...	...	...	...	...	...	...	...	...
Fracture	...	...	1	...	1	...	1	1	2	...	...	1	...	...	...	1	...	1
Fracture of the skull	1	...	...	...	1	1	2	1	3	...	...	...	...	...	...	...	...	...
Injury of spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Neglect	...	1	...	...	...	1	...	2	2	...	...	...	...	...	...	...	...	...
Strangulation	1	...	...	...	...	...	1	...	1	...	...	...	1	...	...	1	...	1
Suicide	4	1	1	...	2	...	8	...	8	...	...	4	...	1	...	5	...	5
Suffocation	1	2	...	...	...	1	2	2	4	2	1	1	...	...	...	1	3	4
Violence	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
Childbed	...	1	...	...	...	1	2	...	2	...	...	...	...	...	...	...	...	...
Cholera asphyxia	1	1	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...
" infantum	1	2	...	...	2	...	...	5	5	...	...	3	1	10	5	...	19	19
" morbus	...	...	...	...	...	...	...	...	...	...	...	1	2	1	2	1	7	...	7
Cirrhosis	...	...	2	...	1	...	3	...	3	1	...	1	...	1	...	3	...	3
Colic	...	...	1	...	...	...	1	...	1	...	...	...	1	1	...	2	...	2
Colica pictonum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coma	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Compression of the brain	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	2
Congestion of the bowels	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
" " brain	7	7	3	4	12	6	19	25	44	6	4	13	2	5	4	9	25	34
" " liver	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	2
" " lungs	3	4	5	5	9	6	16	21	37	7	6	4	...	1	1	13	6	19
Consumption of the bowels	...	...	1	1	...	...	2	...	2	...	2	...	...	...	...	1	1	2

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	FIRST QUARTER, COMMENCING DECEMBER 30, 1854.									SECOND QUARTER, COMMENCING MARCH 31, 1855.								
	JANUARY.		FEBRUARY.		MARCH.		Adults.	Minors.	Total.	APRIL.		MAY.		JUNE.		Adults.	Minors.	Total.
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.			
Consumption of the lungs	68	64	60	48	63	74	315	62	377	51	59	72	72	44	33	270	61	331
Convulsions	15	22	15	26	38	15	4	127	131	27	25	21	24	33	21	4	147	151
" puerperal	...	5	...	1	...	2	7	1	8	...	...	...	1	...	...	1	...	1
Croup	19	8	15	20	10	17	...	89	89	12	8	9	10	9	3	...	51	51
Cyanosis	1	...	2	1	...	...	...	5	5	3	...	2	2	1	2	...	10	10
Debility	17	15	16	16	16	24	56	48	104	20	16	20	14	13	16	58	41	99
Delirium tremens	...	...	1	1	...	...	2	...	2	...	...	...	...	...	...	...	...	...
Diabetes	...	...	1	...	...	...	1	...	1	1	...	...	...	...	...	1	...	1
Diarrhœa	4	5	5	5	5	2	10	16	26	5	...	2	4	6	8	15	10	25
Disease of the abdomen	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...
" bladder	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...
" brain	5	3	5	2	8	4	5	22	27	6	1	7	5	3	3	7	18	25
" heart	5	8	10	7	14	7	37	14	51	6	6	12	8	6	12	34	16	50
" kidneys	...	...	...	...	1	...	1	...	1	...	...	...	1	1	...	2	...	2
" liver	2	1	...	...	...	1	3	1	4	3	...	1	2	1	1	7	1	8
" lungs	2	1	1	2	2	4	6	6	12	...	6	...	2	...	2	4	6	10
" ovaries	...	...	...	2	...	1	3	...	3	...	...	...	...	...	...	...	...	...
" prostate gland	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
" skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
" spine	...	1	...	1	1	1	1	3	4	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	1	...	...	4	3	3	5	8	1	1	1	3	...	1	5	2	7
" uterus	...	1	...	...	...	...	1	...	1	...	1	...	...	...	...	1	...	1
Dropsy	5	13	5	6	7	6	33	9	42	3	6	5	3	7	5	27	2	29
" abdominal	1	1	1	1	2	1	6	1	7	...	3	1	1	2	...	6	1	7
" of the brain	14	8	20	13	16	7	2	76	78	10	7	9	10	9	10	3	52	55

Dropsy of the chest	1	8	8	...	8	5	12	8	15	2	...	4	5	3	1	9	6	15
" " heart	2	4	2	...	...	1	6	8	9	1	...	2	...	2	...	8	2	5
" " liver	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
" " ovaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1
Dysentery	2	1	7	8	12	8	18	15	28	8	2	7	4	8	8	17	10	27
Dyspepsia	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Dysuria	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Effusion on the brain	2	6	1	8	1	4	2	15	17	4	1	1	5	...	8	2	12	14
" chest	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
" heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1
" lungs	...	...	...	1	...	1	1	1	2	...	2	2	...	...	1	5	...	5
Enlargement of the heart	1	1	1	...	2	...	8	2	5	1	...	1	2	4	1	8	1	9
" " liver	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...
Epilepsy	...	...	...	...	2	8	2	8	5	...	2	1	1	2	1	5	2	7
Erysipelas	8	8	5	4	2	5	18	14	27	4	7	7	5	8	8	18	16	29
Excessive heat	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Exhaustion	...	...	...	...	1	...	...	1	1	...	1	...	...	...	...	1	...	1
Fatty degeneration of liver	...	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Fever	...	...	1	8	2	...	...	6	6	...	...	1	...	...	1	...	2	2
" bilious	1	...	...	...	1	...	1	1	2	1	...	4	2	1	4	10	2	12
" brain	...	...	1	1	...	...	...	2	2	...	...	...	...	...	...	...	...	...
" congestive	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
" continued	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
" intermittent	...	...	...	...	1	...	...	1	1	...	...	...	1	...	...	...	1	1
" hectic	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
" puerperal	...	4	...	4	...	7	18	2	15	...	18	...	5	...	2	19	1	20
" remittent	2	2	1	1	2	1	2	7	9	...	2	1	1	1	...	2	8	5
" scarlet	8	8	6	8	8	8	1	35	36	6	7	5	5	7	5	...	35	35
" typhoid	14	9	7	6	10	9	36	19	55	7	5	4	10	10	3	25	14	39
" typhus	5	5	...	...	2	1	8	5	13	3	2	4	1	1	2	12	1	18
Fungus antrum	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
" hæmatodes	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Gangrene	1	2	...	...	...	...	2	1	3	...	1	1	...	...	...	1	1	2
" of the arm	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
" " lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	FIRST QUARTER, COMMENCING DECEMBER 30, 1854.									SECOND QUARTER, COMMENCING MARCH 31, 1855.								
	JANUARY.		FEBRUARY.		MARCH.		Adults.	Minors.	Total.	APRIL.		MAY.		JUNE.		Adults.	Minors.	Total.
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.			
Gangrene of the uterus	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Gout	...	1	...	1	...	...	2	...	2	...	...	...	...	...	...	...	...	...
" of the heart	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Hemorrhage	2	3	1	1	...	...	3	4	7	...	...	2	...	2	...	3	1	4
" from the lungs	...	1	...	1	1	...	2	1	3	1	...	3	...	1	...	5	...	5
" " stomach and bowels	1	...	1	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...
" " umbilicus	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	2
" " uterus	...	1	...	2	...	...	3	...	3	...	1	...	2	...	...	3	...	3
Hernia	...	...	...	1	...	1	2	...	2	...	...	1	1	...	...	2	...	2
Hooping-cough	2	6	1	5	2	2	...	18	18	5	1	...	...	3	1	...	10	10
Ichthyosis	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Icterus	5	1	2	...	2	...	5	5	10	...	1	...	1	...	...	2	...	2
Inanition	..	3	5	6	6	3	3	20	23	3	6	6	1	4	3	4	19	23
Induration of liver	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Inflammation	...	...	1	1	...	...	...	2	2	...	...	...	...	1	1	...	2	2
" of the bladder	1	...	...	...	...	...	1	...	1	1	...	...	...	...	1	2	...	2
" brain	11	12	11	8	20	10	22	50	72	12	13	18	11	8	16	8	70	78
" bronchi	14	16	12	14	12	21	23	66	89	18	12	21	18	7	4	12	63	75
" chest	1	2	1	1	1	1	...	7	7	...	...	...	...	...	...	...	...	...
" heart	1	1	...	...	1	...	2	1	3	...	...	3	...	1	...	3	1	4
" hip-joint	...	1	...	...	...	1	...	2	2	...	...	...	...	...	...	...	...	...
" kidneys	...	2	...	...	...	...	2	...	2	...	1	...	...	...	...	1	...	1
" larynx	...	...	...	1	...	1	...	2	2	1	2	2	1	...	...	1	5	6
" liver	1	1	3	5	...	3	11	2	13	1	...	3	4	...	1	8	1	9
" lungs	32	25	30	28	35	24	75	99	174	29	22	31	27	15	13	67	70	137

Inflammation of parotids	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
" peritoneum	...	7	1	3	2	6	17	2	19	2	3	...	3	3	6	12	5	17				
" pleura	2	1	2	1	2	2	10	...	10	1	1	3	2	1	...	5	3	8				
" spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1				
" spine	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1				
" stomach and bowels	3	4	4	6	4	10	16	15	31	9	3	10	6	6	9	21	22	43				
" throat	...	...	1	2	...	...	3	...	3	1	...	...	3	...	...	2	2	4				
" tonsils	1	...	...	...	...	...	...	1	1	...	...	...	1	...	...	...	1	1				
" trachea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1				
" uterus	...	1	...	1	...	...	2	...	2	1	...	1	...	...	...	2	...	2				
Influenza	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	3	...	3				
Insanity	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1				
Intemperance	2	1	...	...	1	...	4	...	4	4	4	3	...	2	...	13	...	13				
Intussusception	1	...	...	...	1	...	...	2	2	1	2	...	...	...	...	2	1	3				
Irritation of brain	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...				
Malformation	3	1	2	5	2	4	...	17	17	1	2	4	1	2	...	...	10	10				
Mania	3	1	...	...	...	...	4	...	4	1	2	4	1	...	...	3	...	3				
Mania à potu	4	...	...	...	3	2	9	...	9	2	...	...	...	2	1	5	...	5				
Mania, puerperal	...	...	...	1	...	1	2	...	2	...	...	...	...	...	...	...	...	...				
Marasmus	16	13	11	17	10	15	9	73	82	13	12	14	14	13	6	7	65	72				
Measles	...	...	3	3	4	1	...	11	11	1	3	1	2	2	...	...	9	9				
Mortification	1	1	...	...	...	...	...	2	2	...	1	2	1	...	...	4	...	4				
" of bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1				
Obstruction of the bowels	2	...	...	...	...	...	1	1	2	...	...	1	...	...	2	3	...	3				
Old age	6	8	6	9	13	13	55	...	55	7	10	9	11	3	7	47	...	47				
Ossification of arteries	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...				
" heart	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...				
Palsy	7	5	5	2	8	3	29	1	30	5	5	6	7	6	4	29	4	33				
" of the brain	...	1	...	...	...	1	...	2	2	...	...	...	...	...	...	...	...	...				
Phlegmasia dolens	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1				
Purpura	...	2	...	...	...	...	...	2	2	1	1	...	...	2	1	1	4	5				
Rheumatism	1	...	...	...	...	...	1	...	1	...	...	1	1	...	1	3	...	3				
Rupia	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1				
Rupture of aorta	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1				
" bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1				

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	FIRST QUARTER, COMMENCING DECEMBER 30, 1854.									SECOND QUARTER, COMMENCING MARCH 31, 1855.								
	JANUARY.		FEBRUARY.		MARCH.		Adults.	Minors.	Total.	APRIL.		MAY.		JUNE.		Adults.	Minors.	Total
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.			
Rupture of heart	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
Scrofula	1	2	5	...	2	1	2	9	11	2	1	4	5	2	...	2	12	14
Scurvy	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
Secondary syphilis	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
Smallpox	7	2	9	11	7	5	4	37	41	8	7	16	7	11	8	7	45	52
Softening of the brain	1	...	2	1	...	...	3	1	4	...	...	2	3	1	...	4	2	6
" " stomach	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Spina bifida	...	2	...	...	...	...	...	2	2	...	...	...	1	...	...	...	1	1
Stillborn	81	21	16	20	30	14	...	132	132	27	15	24	24	33	27	...	150	150
Stricture of the rectum	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1
Syphilis	...	...	...	1	...	...	1	...	1	...	1	...	...	...	...	...	1	1
Tabes mesenterica	2	2	1	...	1	...	2	4	6	1	1	3	1	1	1	2	6	8
Teething	1	...	...	1	...	...	...	2	2	...	1	...	1	...	1	...	3	3
Tetanus	1	...	...	1	...	...	2	...	2	...	2	2	...	...	1	1	4	5
Trismus	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2	2
Tuberculosis	1	2	1	...	1	1	3	3	6	...	...	...	...	...	...	...	...	...
Tumor of the abdomen	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	...	2
Ulceration	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
" of the pharynx	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
" stomach and bowels	...	2	...	1	...	1	2	2	4	1	...	1	1	...	1	3	1	4
" throat	1	...	...	...	3	...	1	3	4	2	1	1	1	...	...	...	5	5
" uterus	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...
Unknown	10	12	12	6	12	5	24	33	57	11	7	9	13	7	11	33	25	58
Uræmia	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
Varioloid	...	...	...	...	2	1	...	3	3	...	2	2	...	...	1	...	5	5

Wounds	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Worms	...	...	...	...	...	1	...	1	1	...	8	...	...	1	...	...	4	4
Totals	450	417	387	380	481	411	1158	1378	2526	398	371	491	418	379	317	1097	1277	2874
From the almshouse		72		86		76	...	...	234		65		78		52	...	...	190
From the country		5		6		8	...	...	19		5		8		11	...	...	24
People of color		45		36		59	...	...	140		70		61		41	...	...	172
Under 1 year		228		225		234	...	...	687		199		231		232	...	...	662
From 1 to 2 years		81		88		85	...	...	249		69		81		46	...	...	196
" 2 to 5 "		69		75		82	...	...	226		76		81		55	...	...	212
" 5 to 10 "		22		26		43	...	...	91		33		42		36	...	...	111
" 10 to 15 "		20		11		13	...	...	44		12		13		10	...	...	35
" 15 to 20 "		24		17		34	...	...	75		16		29		18	...	...	63
" 20 to 30 "		120		89		107	...	...	316		86		108		59	...	...	253
" 30 to 40 "		85		70		76	...	...	231		69		83		59	...	...	211
" 40 to 50 "		51		84		55	...	...	140		70		61		51	...	...	182
" 50 to 60 "		52		81		47	...	...	130		53		57		41	...	...	151
" 60 to 70 "		47		55		48	...	...	150		41		44		33	...	...	118
" 70 to 80 "		40		29		45	...	...	114		28		50		36	...	...	114
" 80 to 90 "		21		15		18	...	...	54		16		24		16	...	...	56
" 90 to 100 "		7		7		5	...	...	19		1		8		8	...	...	7
" 100 to 110 "		...		...		...	...	...	...		...		1		1	...	...	2
" 110 to 120 "		...		...		...	...	...	...		...		1		...	...	...	1
Totals of monthly mortality		867		767		892	...	...	...		769		909		696	...	...	...
Total males for the quarter		...		...		...	...	...	1818		...		...		...	...	...	1268
Total females for the quarter		...		...		...	...	...	1208		...		...		...	...	...	1106
Total adults for the quarter		...		...		...	1158	...	...		...		...		...	1097	...	...
Total minors for the quarter		...		...		...	...	1378	...		...		...		...	...	1277	...
Total for the quarter		...		...		...	...	...	2526		...		...		...	...	...	2874

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	THIRD QUARTER, COMMENCING JUNE 30.									FOURTH QUARTER, COMMENCING SEPT. 29.												
	JULY.		AUGUST.		SEPT.		Adults.	Minors.	Total.	OCT.		NOV.		DEC.		Adults.	Minors.	Total 4th quarter.	Total 3d quarter.	Total 2d quarter.	Total 1st quarter.	Total for year.
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.							
Abscess	1	...	2	1	1	...	...	5	5	2	1	1	1	2	1	6	2	8	5	8	1	17
" abdominal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" lumbar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" of brain	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	...	1	2
" breast	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" liver	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1	...	2
" lungs	...	1	...	1	...	...	2	...	2	...	...	1	...	...	...	1	...	1	2	5	1	9
" psoas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
" thigh	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	1	1	...	2
Albuminuria	...	1	1	1	...	...	2	1	3	...	...	...	1	...	...	1	...	1	3	3	...	7
Anæmia	1	1	2	1	...	...	1	4	5	1	...	...	1	1	...	3	...	3	5	5	1	14
Aneurism	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	2	...	2	...	1	...	3
" of aorta	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	3	4
Angina pectoris	...	1	...	...	...	...	1	...	1	...	...	1	...	...	...	1	...	1	1	1	2	5
" faucium	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Aphthæ	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Apoplexy	3	6	5	6	2	2	22	2	24	7	2	6	1	5	4	24	1	25	24	35	26	110
" of lungs	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Asphyxia	1	...	2	...	2	2	1	6	7	1	4	...	1	...	1	...	7	7	7	6	8	28
Asthma	...	...	1	...	1	2	4	...	4	1	1	1	...	...	2	5	...	5	4	5	5	19
Atrophy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4
Cachexia	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	2	...	3
Calculi, vesical	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Cancer and scirrhus	1	3	2	3	2	...	10	1	11	1	1	...	...	1	2	5	...	5	11	6	3	25
" of bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

Cancer of the breast	...	2	...	...	...	...	2	...	2	...	1	...	...	...	...	1	...	1	2	3	1	7
" face	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" kidneys	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
" stomach and bowels	...	1	1	...	1	...	3	...	3	3	...	2	...	...	...	5	...	5	3	5	5	18
" tongue	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
" uterus	...	3	...	1	...	2	6	...	6	...	...	...	...	...	...	...	...	6	5	7	18	
Cancrum oris	...	...	...	...	1	1	...	2	2	...	...	1	...	...	...	...	1	1	2	2	7	12
Carbuncle, malignant	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Caries	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	1
" of spine	1	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	1	1	1	...	1	3
Casualties	10	2	14	4	16	3	41	8	49	8	2	3	...	12	1	27	4	31	49	22	31	133
Burns and scalds	...	...	...	2	...	1	...	3	3	2	1	1	...	...	1	1	4	5	3	9	20	37
Concussion of brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Drowned	11	2	17	3	4	1	24	19	43	7	1	1	2	3	1	10	5	15	43	34	14	106
Exposure	1	...	...	...	...	...	1	...	1	...	...	2	...	...	1	2	1	3	1	...	3	7
Fracture	1	1	1	2	...	...	5	...	5	1	...	1	...	...	...	1	1	2	5	1	2	10
" of skull	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
Injury of the spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Neglect	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	...	2	3	
Poisoning	...	1	...	...	1	...	1	1	2	...	1	...	...	...	...	...	1	1	2	...	...	3
Strangulation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Suffocation	2	...	...	1	1	...	2	2	4	...	1	...	...	...	1	1	1	2	4	4	4	14
Suicide	3	1	1	1	...	...	6	...	6	1	...	2	1	4	...	3	...	3	6	5	3	27
Violence	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	1	...	2
Childbed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Chlorosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	1
Cholera	3	7	5	11	...	1	25	2	27	2	...	1	1	...	...	3	1	4	27	...	2	33
" infantum	105	94	155	121	28	24	...	527	527	3	5	1	...	...	1	...	15	15	527	19	5	566
" morbus	3	3	2	6	2	1	16	6	22	...	...	...	...	...	...	...	...	...	22	7	...	29
Cirrhosis	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	3	3	7
Colic	...	1	...	2	...	...	2	1	3	1	1	...	...	...	...	2	...	2	3	2	1	8
Coma	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	...	2	...	...	1	3
Compression of the brain	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	2	...	3

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	THIRD QUARTER, COMMENCING JUNE 30.									FOURTH QUARTER, COMMENCING SEPT. 29.									Total 3d quarter.	Total 2d quarter.	Total 1st quarter.	Total for year.
	JULY.		AUGUST.		SEPT.		Adults.	Minors.	Total.	OCT.		NOV.		DEC.		Adults.	Minors.	Total 4th quarter.				
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.							
Concussion of the brain	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	1
Congestion of the brain	16	11	10	8	8	4	11	46	57	7	10	8	7	10	8	13	27	40	57	84	44	175
" " bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	1	2
" " liver	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	2	...	3
" " lungs	2	3	...	2	1	4	3	9	12	1	4	1	2	3	3	9	5	14	12	19	37	82
Constipation	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	2	2	...	...	...	2
Consumption of the bowels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4
" laryngeal	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
" of the lungs	47	50	60	69	43	40	253	56	309	53	71	29	52	41	64	250	60	310	309	331	377	1327
Convulsions	46	37	40	44	26	19	3	209	212	32	19	22	17	25	17	5	127	132	212	151	131	626
" puerperal	...	...	...	3	...	1	4	...	4	...	1	...	1	...	...	2	...	2	4	1	8	15
Coryza	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Coup de soleil	11	2	...	...	...	...	12	1	13	...	...	...	...	...	...	...	...	...	13	...	...	13
Cramp	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	2	3	...	...	...	3
Croup	2	5	8	5	8	10	...	38	38	18	15	16	10	15	18	...	87	87	38	51	89	265
Cyanosis	2	1	...	2	4	1	...	10	10	3	...	1	1	3	1	...	9	9	10	10	5	34
Debility	25	20	19	26	12	11	40	73	113	19	16	12	9	10	11	36	41	77	113	99	104	393
Delirium tremens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Diabetes	...	...	1	...	...	...	1	...	1	...	...	...	1	...	...	1	...	1	1	1	1	4
Diarrhœa	18	14	19	26	13	10	25	75	100	7	11	1	2	2	8	16	10	26	100	25	26	177
Disease of the abdomen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" brain	7	2	7	10	3	...	9	20	29	3	4	1	2	4	2	3	13	16	29	25	27	97
" bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" chest	...	1	2	...	3	2	5	3	8	1	1	...	...	...	...	1	1	2	8	...	...	10
" heart	7	9	9	5	4	1	28	7	35	5	4	5	7	7	6	25	9	34	35	50	51	170

Disease of the kidneys	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
" liver	...	...	2	4	2	...	8	...	8	2	1	...	1	...	1	4	1	5	8	8	4	25
" hip	...	1	1	1	...	...	1	2	3	...	...	1	...	...	...	1	...	1	3	...	...	4
" lungs	2	...	2	...	1	...	3	2	5	2	1	...	1	1	1	4	2	6	5	10	12	33
" nerves	...	1	...	...	1	...	1	1	2	...	...	...	...	...	...	...	...	...	2	...	...	2
" ovaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
" prostate gland	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	1	...	2
" skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" spine	1	...	...	...	...	...	...	1	1	...	...	...	1	1	1	2	3	1	...	4	3
" stomach and bowels	...	1	1	...	...	...	1	1	2	...	2	1	...	...	...	1	2	3	2	7	8	20
" uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Dropsy	4	6	10	8	4	7	33	6	39	9	5	...	...	5	7	18	8	26	39	29	42	136
" abdominal	1	2	2	1	1	2	7	2	9	...	5	1	1	...	1	8	...	8	9	7	7	31
" of the brain	13	15	17	14	12	4	...	75	75	8	10	12	...	9	7	2	44	46	75	55	78	254
" " chest	3	2	2	2	...	...	4	5	9	...	3	...	3	2	..	5	3	8	9	15	15	47
" " heart	...	...	...	...	2	3	5	...	5	...	...	1	...	1	...	2	...	2	5	5	9	21
" " liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" " lungs	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1
" " ovaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Dysentery	21	22	55	42	28	21	78	106	184	15	4	3	2	...	3	20	7	27	184	27	28	266
Dyspepsia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Dysuria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Effects of heat	11	4	...	...	...	...	15	...	15	...	...	...	...	...	...	...	...	...	15	...	...	15
Effusion on the brain	1	4	11	8	4	1	...	29	29	4	1	2	2	1	2	2	10	12	29	14	17	72
" chest	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	...	2	...	...	1	3
" heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2	7
Enlargement of the heart	...	...	...	1	...	1	1	1	2	...	4	3	2	...	1	9	1	10	2	9	5	26
" " liver	1	...	...	...	...	...	...	1	1	1	...	...	1	...	...	2	...	2	1	...	1	4
Epilepsy	2	3	...	2	1	...	4	4	8	2	2	...	...	...	1	3	2	5	3	7	5	25
Erysipelas	3	1	2	1	2	1	2	3	10	4	...	2	...	2	1	6	3	9	10	29	27	75
Excessive heat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Exhaustion	1	...	...	2	...	...	3	...	3	...	...	...	...	...	...	...	...	...	3	1	1	5
Fatty degeneration of the liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Fever	2	2	1	...	1	...	3	3	6	1	...	1	...	...	...	1	1	2	6	2	6	16

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	THIRD QUARTER, COMMENCING JUNE 30.									FOURTH QUARTER, COMMENCING SEPT. 29.												
	JULY.		AUGUST.		SEPT.		Adults.	Minors.	Total.	OCT.		NOV.		DEC.		Adults.	Minors.	Total 4th quarter.	Total 3d quarter.	Total 2d quarter.	Total 1st quarter.	Total for year.
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.							
Fever, brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
" bilious	1	1	2	2	1	4	9	2	11	4	2	1	2	2	...	8	3	11	11	12	2	36
" congestive	1	...	...	...	2	...	1	2	3	1	...	1	1	...	...	2	1	3	3	1	...	7
" continued	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" gastric	...	...	...	...	...	...	...	...	...	1	...	1	1	1	...	1	3	4	...	...	...	4
" hectic	...	...	...	...	...	1	1	...	1	1	...	...	1	...	...	...	2	2	1	...	1	4
" intermittent	...	...	...	...	1	2	2	1	3	1	1	...	...	...	...	...	2	2	3	1	1	7
" malignant	...	...	...	...	1	...	1	...	1	1	...	...	...	...	...	1	...	1	1	...	...	2
" nervous	...	...	...	1	...	...	1	...	1	...	1	...	...	...	...	1	...	1	1	...	...	2
" pernicious	...	...	...	...	2	...	2	...	2	...	...	...	...	...	...	...	...	...	2	...	...	2
" puerperal	...	...	...	...	...	...	...	...	...	...	...	...	1	...	5	6	...	6	...	20	15	41
" remittent	...	1	1	2	5	6	6	9	15	7	5	4	...	3	...	13	6	19	15	5	9	48
" scarlet	7	2	2	6	5	4	...	26	26	7	2	2	9	22	24	...	66	66	26	35	36	163
" typhoid	4	6	14	12	9	14	39	20	59	15	22	14	18	10	4	56	22	78	59	39	55	231
" typhus	1	2	6	5	6	3	18	5	23	3	4	1	...	1	1	10	...	10	23	18	18	59
" yellow	...	...	...	...	2	...	1	1	2	...	...	1	...	...	...	1	...	1	2	...	...	3
Fungus antrum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" hæmatodes	...	...	1	...	...	...	1	...	1	...	...	...	2	...	...	2	...	2	1	...	1	4
Gangrene	1	1	1	2	2	...	7	...	7	...	...	...	...	...	2	1	1	2	7	2	3	14
" of the arm	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" " intestines	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
" " lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" " uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Gout	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	2	...	2	...	...	2	4
" of the heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1

Hemorrhoids	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	...	1
Hemorrhage	...	...	1	1	2	...	2	2	4	...	...	...	...	1	...	1	...	1	4	4	7	16
" from the lungs	1	...	1	1	1	2	6	...	6	1	2	4	...	...	...	7	...	7	6	5	8	21
" " stomach and bowels	...	...	2	...	...	3	5	...	5	1	...	...	...	1	...	1	1	2	5	...	2	9
" " umbilicus	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	2	...	3
" " uterus	...	...	...	5	...	1	6	...	6	...	...	...	...	...	1	...	1	1	6	8	3	18
Hernia	...	1	...	1	...	1	2	1	3	...	...	1	...	...	...	1	...	1	3	2	2	8
Herpes	...	...	...	...	1	...	...	1	1	1	...	...	...	...	...	1	...	1	1	...	...	2
Hives	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Hooping-cough	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Hydrophobia	6	1	14	6	7	10	...	44	44	3	2	2	3	5	3	...	18	18	44	10	18	90
Ichthyosis	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Icterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Ileus	3	1	1	4	2	...	6	5	11	...	1	1	1	...	1	4	...	4	11	2	10	27
Inanition	1	...	...	...	1	1	2	1	3	...	1	...	...	...	...	1	...	1	3	...	...	4
Indigestion	9	2	8	4	7	7	5	32	37	8	5	...	3	1	4	1	20	21	37	23	23	104
Induration of liver	1	1	...	...	1	...	1	2	3	...	...	...	...	...	...	...	...	...	3	...	...	8
" stomach	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Inflammation	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	1
" of the abdomen	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	2	2	5
" bladder	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	1
" brain	...	...	...	1	...	...	1	...	1	1	...	...	...	...	...	1	...	1	1	2	1	5
" bronchi	15	12	24	11	15	10	6	81	87	13	12	5	4	10	7	18	38	51	87	78	72	288
" chest	6	5	5	3	3	2	5	19	24	11	7	7	3	9	8	11	34	45	24	75	89	283
" heart	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1	2	8	...	...	7	10
" hip-joint	1	...	...	1	...	1	2	1	3	1	...	2	...	...	1	4	...	4	3	4	3	14
" kidneys	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
" larynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	2	4
" liver	1	...	1	...	1	...	1	2	3	...	...	...	...	1	1	...	2	2	3	6	2	13
" lungs	4	1	2	2	1	1	3	3	11	...	1	...	2	...	2	4	1	5	11	9	13	38
" mouth	5	5	14	15	11	10	14	46	60	10	12	12	6	19	12	26	45	71	60	137	174	442
" parotid glands	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	1
" peritoneum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" pleura	1	3	1	2	...	...	3	4	7	1	5	2	...	3	9	2	11	7	17	19	54	
" prostate gland	1	...	...	...	...	1	2	...	2	1	...	1	...	1	1	3	1	4	2	8	10	24
	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	THIRD QUARTER, COMMENCING JUNE 30.									FOURTH QUARTER, COMMENCING SEPT. 29.												
	JULY.		AUGUST.		SEPT.		Adults.	Minors.	Total.	OCT.		NOV.		DEC.		Adults.	Minors.	Total 4th quarter.	Total 3d quarter.	Total 2d quarter.	Total 1st quarter.	Total for year.
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.							
Inflammation of spine	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	1	...	2
" spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" stomach and bowels	11	17	19	16	7	8	36	42	78	12	9	5	1	3	5	20	15	35	78	48	31	187
" throat	1	1	...	1	1	1	1	4	5	...	...	...	1	1	1	...	3	3	5	4	3	15
" tonsils	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	1	1	1	3
" trachea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" tympanum	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	1
" uterus	...	1	...	2	...	...	3	...	3	...	...	...	...	...	1	1	...	1	3	2	2	8
Influenza	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	3	...	4
Insanity	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Intemperance	2	4	4	2	2	...	14	...	14	1	1	1	4	4	1	12	...	12	14	13	4	43
Intussusception	...	...	1	...	1	...	...	2	2	...	...	...	...	...	...	...	...	...	2	3	2	7
Irritation of brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Ischuria renalis	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	1
Leucocythemia	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	...	1
Malformation	...	3	4	3	2	...	...	12	12	2	...	1	...	1	...	...	4	4	12	10	17	43
Mania	1	...	...	1	1	...	3	...	3	1	...	...	...	...	...	1	...	1	3	8	4	16
Mania à potu	1	...	4	...	1	...	6	...	6	...	...	1	1	3	...	5	...	5	6	5	9	25
Mania, puerperal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Marasmus	82	16	58	41	28	36	5	204	209	24	11	14	9	8	7	13	60	73	209	72	82	436
Measles	...	...	...	...	...	...	...	...	...	2	1	1	...	...	...	...	4	4	...	9	11	24
Mortification	...	...	...	1	...	1	...	2	2	...	...	...	...	1	1	2	...	2	2	4	2	10
" of bowels	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	1	...	2
Nervous erethism	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Neuralgia	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	1

Obstruction of the bowels	1	...	...	2	...	...	2	1	2	...	1	2	1	...	1	8	2	5	8	8	2	13
" liver	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Old age	2	8	7	9	5	8	34	...	34	4	9	2	8	8	11	37	...	37	34	47	55	173
Ossification of arteries	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	1	2
" heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Osteo-sarcoma	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Palsy	8	8	7	4	...	8	24	1	25	5	5	3	1	2	2	16	2	18	25	33	30	106
" of the brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Perforation of the intestines	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Phlegmasia dolens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Purpura	...	1	...	...	1	1	...	8	8	...	1	...	1	...	...	...	2	2	8	5	2	12
Rash	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Rheumatism	1	...	1	...	...	...	2	...	2	...	...	...	...	...	...	...	...	2	3	1	6
Rupia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Rupture of aorta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	1	...	1
" bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
" urethra	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	...	1
" uterus	...	...	...	1	...	1	2	...	2	...	...	...	1	...	...	1	...	1	2	...	...	8
Scrofula	2	2	4	1	2	4	5	10	15	4	3	1	4	2	...	4	10	14	15	14	11	54
Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Secondary syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Smallpox	11	8	11	8	11	9	9	49	58	16	8	22	17	37	30	24	106	130	58	52	41	281
Softening of the brain	4	...	3	...	...	...	3	4	7	2	...	1	...	...	...	2	1	3	7	6	4	20
" " stomach	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Sore mouth	2	2	3	...	...	1	...	8	8	...	...	...	...	...	...	...	...	...	8	...	...	8
" throat	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	1
Spina bifida	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1	2	4
Stillborn	30	24	27	19	26	18	...	144	144	37	22	31	25	24	23	...	162	162	144	150	132	588
Stomatitis	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	1
Stricture of the œsophagus	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
" rectum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Suppression of urine	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	1
Syphilis	...	1	...	1	...	...	...	2	2	...	1	...	...	...	...	...	1	1	2	1	1	5
Tabes mesenterica	...	...	4	6	8	1	...	14	14	1	2	...	1	...	...	...	4	4	14	8	6	32

TABLE OF MORTALITY FOR THE YEAR 1855—*Continued.*

	THIRD QUARTER, COMMENCING JUNE 30.									FOURTH QUARTER, COMMENCING SEPT. 29.												
	JULY.		AUGUST.		SEPT.		Adults.	Minors.	Total.	OCT.		NOV.		DEC.		Adults.	Minors.	Total 4th quarter.	Total 3d quarter.	Total 2d quarter.	Total 1st quarter.	Total for year.
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.							
Teething	2	1	2	2	3	1	...	11	11	...	1	...	3	...	...	...	4	4	11	3	2	20
Tetanus	1	2	1	...	2	...	2	4	6	2	...	1	...	1	...	2	2	4	6	5	2	17
Trismus	1	...	1	1	1	...	1	3	4	...	1	...	1	...	...	...	2	2	4	2	...	8
Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	6
Tumor in abdomen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
" in stomach	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...	1
" ovarian	...	...	...	...	...	1	1	...	1	...	...	...	1	...	...	1	...	1	1	...	...	2
Ulceration	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	1	...	2
" of the liver	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
" pharynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" stomach and bowels	...	2	2	3	...	...	3	4	7	...	1	2	2	1	...	4	2	6	7	4	4	21
" throat	...	...	...	...	2	1	...	3	3	...	1	1	...	1	1	...	4	4	3	5	4	16
" tonsils	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	...	1
" uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Unknown	18	11	11	6	11	10	28	34	62	11	9	5	1	10	7	28	15	43	62	58	57	220
Uræmia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Varicella	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Varioloid	2	1	...	2	1	2	2	6	8	2	...	...	1	3	2	...	8	8	8	5	3	24
Wounds	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	1	2
Worms	1	1	...	1	...	...	1	2	3	...	...	1	...	...	...	...	1	1	3	4	1	9
Totals	595	517	774	682	440	378	1107	2279	3386	468	399	812	275	370	847	952	1219	2171	3386	2374	2526	10457
From the almshouse		65		92		53	...	...	210		40		87		48	...	...	125	...	...	...	...
From the country		16		24		27	...	...	67		16		5		3	...	...	24	...	...	...	...
People of color		56		81		37	...	...	174		50		26		26	...	...	102	...	...	...	...

Under 1 year	507	559	248	...	...	1314	238	171	175	...	...	584	...	...	...	2247
From 1 to 2 years	120	247	116	...	...	483	58	49	59	...	...	166	...	...	...	1094
" 2 to 5 "	64	101	80	...	...	245	92	62	102	...	...	256	...	...	...	989
" 5 to 10 "	32	32	38	...	...	97	37	29	40	...	...	106	...	...	...	405
" 10 to 15 "	15	22	12	...	...	49	9	8	11	...	...	28	...	...	...	156
" 15 to 20 "	29	37	23	...	...	89	34	21	23	...	...	78	...	...	...	305
" 20 to 30 "	76	115	83	...	...	274	85	65	72	...	...	222	...	...	...	1065
" 30 to 40 "	81	118	61	...	...	260	101	62	65	...	...	228	...	...	...	930
" 40 to 50 "	54	72	55	...	...	181	64	40	42	...	...	146	...	...	...	649
" 50 to 60 "	52	48	27	...	...	127	41	39	49	...	...	129	...	...	...	537
" 60 to 70 "	40	41	35	...	...	116	54	21	34	...	...	109	...	...	...	498
" 70 to 80 "	25	40	25	...	...	90	35	13	24	...	...	72	...	...	...	390
" 80 to 90 "	13	19	13	...	...	45	17	5	14	...	...	36	...	...	...	191
" 90 to 100 "	4	4	6	...	...	14	...	2	7	...	...	9	...	...	...	49
" 100 to 110 "	...	1	1	...	...	2	2	...	...	...	...	2	...	...	...	6
" 110 to 120 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Totals of monthly mortality . .	1112	1456	818	...	...	...	867	587	717	...	...	...	...	...	...	...
Total males for the quarter . .	...	...	...	...	...	1809	...	...	...	...	...	1150	...	...	...	5545
Total females for the quarter . .	...	...	...	...	...	1577	...	...	...	...	...	1021	...	...	...	4912
Total adults for the quarter . .	...	...	...	1107	...	...	...	...	...	952	...	...	...	...	...	...
Total minors for the quarter . .	...	...	...	...	2279	...	...	...	...	...	1219	...	...	...	...	...
Total for the quarter	...	...	...	...	...	3386	...	...	...	...	...	2171	...	...	...	10457

ERRATA.

Page 467, 18th line from top, *read* "6.05" *for* "6.13."

Page 478, 5th line from bottom, *insert*, after "March 137," "January 132."

Page 476, 4th line from top, *read* "12.85" *for* "22.78," and "20.42" *for* "51.33;" also, on the next line following, *read* "5.61" *for* "10.77."

The Librarian reported the following donations to the Library:

From Messrs. LIPPINCOTT & Co., the *U. S. Pharmacopœia*, for 1850.

From Dr. CONDIE, Barlow's *Manual of the Practice of Medicine*, American edition, edited by Dr. Condie.

From Dr. EDWARD PEACE, *Cruveilhier, Anatomie Descriptive*, 4 vols. 8vo.

The College then elected, by ballot, the following gentlemen as its delegates to the meeting of the American Medical Association, to be held at Detroit:—

FRANKLIN BACHE,	ROBERT P. THOMAS,
GEORGE B. WOOD,	THOMAS H. YARDLEY,
J. RODMAN PAUL,	ALFRED STILLÉ,
CHARLES D. MEIGS,	WILLIAM V. KEATING,
GEORGE W. NORRIS,	WILLIAM B. PAGE,
JOHN B. BIDDLE,	HENRY HARTSHORNE.

Propositions 63 and 64, for Fellowship, were presented.

Dr. CONDIE made some remarks on the simultaneous prevalence, at the present time, of erysipelas and puerperal fever at the Philadelphia Hospital, Blockley.

Stated Meeting, March 5, 1856.

Dr. WOOD, President, in the chair.

Present, twenty-one Fellows.

Dr. WOOD presented the notes of two cases of

MALIGNANT DISEASE.

Dr. Wood stated, that in compliance with his engagement at the last meeting, he would now offer to the College a report of the two malignant cases then referred to, as having recently occurred in the Pennsylvania Hospital. The report was drawn

up by his young friend Dr. Augustus Wilson, one of the resident physicians of the house, who had the immediate charge of the cases.

CASE 1.—MICHAEL OBERDERFER, a German, æt. 36, was admitted into the Hospital, December 5, 1855, laboring under symptoms of incipient phthisis. He was placed on the treatment commonly adopted in such cases in the house (cod-liver oil), under which his condition was much improved.

On the 14th of January, he complained of costiveness, and of some uneasiness in the bowels, for which Dr. Wood ordered six grains of comp. ext. of colocynth, and two grains of extract of hyoscyamus at bedtime; also half a grain of extract of belladonna, three times a day. This relieved him entirely.

On the 21st, about noon, he was suddenly seized with severe pains in the back and head; his face became flushed; the conjunctiva injected; the pulse accelerated to 130; his countenance expressive of much anxiety; he complained of heat and excessive thirst; and his tongue was red and clean. Cold was applied to the head. Neutral mixture and small pieces of ice were given at short intervals during the day, and eight cut cups put to the back.

In the course of the night the pains increased, and slight convulsive twitchings, interfering with respiration, occurred every few minutes.

His sufferings were much increased by these pains, which not unfrequently were so severe as to extort screams of agony from him.

On the morning of the 22d, his symptoms in other respects remaining unchanged, a purplish blush diffused itself over his entire surface; his body being also covered with petechiæ.

At 10 A. M., he was seen by Dr. Wood, who ordered a blister 3 inches by 6, to his back, an injection of 10 drops of laudanum, to be repeated if necessary, at intervals of four hours; the cold to the head, and the neutral mixture to be continued; the belladonna was suspended.

Towards evening he seemed easier, and slept a few hours; during the night he was quiet, and on the morning of the 23d, at about 5½ o'clock, he asked the nurse for a drink of water.

Half an hour afterwards he died. No diarrhœa or vomiting had occurred in the whole course of the affection; his mind was throughout perfectly clear.

Autopsy, 16 hours after death. Rigor mortis was entirely wanting. The body was covered with petechiæ, much like those of typhus fever. The cuticle peeled off almost at the slightest touch. There were two spots on the back, one in the cervical, the other in the lumbar region, each about 8 inches in diameter, which upon being cut into were found to be caused by extravasation of blood in the muscular tissue, and presented the appearance of a severe contusion. No coagulation of the blood had taken place.

Within the cranium and spinal column there was intense congestion of the membranes, as well as of the brain and cord; also a considerable effusion of serum. These organs were much softened, the brain especially, so much so as to lose its shape when removed from the skull.

On the membranes of the brain and cord, as well as on the opposed surfaces of the pleura, were found numerous miliary tubercles. Both lungs were studded with tubercles, but no cavities had been formed.

The spleen was somewhat softened, the liver natural. The small intestine had upwards of twenty ulcers, an inch or more in diameter, situated transversely, several of which constricted the bowel to one-third of the natural calibre.

Case 2.—Charles McFadden, æt. 22, a sailor, was admitted into the Hospital July 9, 1855, laboring under phthisis. He was treated for this and improved materially; his cough diminished; his night-sweats ceased, and he gained some 20 pounds in weight.

February 5, 1856. In the evening he complained of headache and slight pains in the lumbar region. Cold was ordered to be applied to the head, and six dry cups to the back.

During the night the pains were much increased; he slept none and was very restless.

February 6. At 6 A. M., I was called by the nurse to see him, and was at once forcibly struck by the similarity of his symptoms and general appearance to those in the case just de-

tailed; his countenance was anxious, and suffused with a dark flush; the conjunctiva injected, pupils natural; a purplish rash was diffused over the whole body, very like that of scarlet fever, and upon the abdomen, petechiæ were observed. His breathing was short, quick, and interfered with, frequently, by convulsive twitchings; but he complained particularly of sharp shooting pains of excruciating severity in the lumbar region, which occurred at intervals of a minute or less. The thirst was excessive; his tongue red and clean; the pulse 140 in the minute. Nausea and vomiting occurred, and continued through the day; the matter ejected being light yellow, and very bitter.

He was ordered 12 cut cups to the back, and cold to the head; limewater and milk to be given occasionally, small pieces of ice to be dissolved in the mouth, and one fluidrachm of solution of morphia every two hours.

Dr. Wood saw him at 10 A. M.; he was then easier, and the flush on the face had partially subsided; he was ordered an enema of 60 drops of laudanum, to be repeated every four hours if necessary. He became quieter and slept a little during the afternoon.

At my evening visit he seemed more comfortable, but his pulse was still quite frequent, his skin hot and his thirst unabated. Treatment continued.

At 11 P. M. I saw him again, and he was sleeping quietly; his breathing comparatively easy; pulse unchanged. About an hour afterwards he died. His mind was clear throughout.

Autopsy, 22 hours after death Rigor mortis not well pronounced. Body covered with a purplish rash, mingled over the abdomen, with petechiæ. The blood was only partially coagulated. The cerebrum, cerebellum, and spinal marrow were intensely congested and softened; the latter especially being almost in a semifluid condition. On the pia mater were noticed several small patches of coagulable lymph.

The lungs were both infiltrated throughout with tubercles and much congested; and at the apex on the left side was a large cavity, as indicated by the physical signs during life.

Nothing abnormal was observed in the spleen, liver, or any other organ.

Dr. Wood said he would offer only a few remarks on these cases, which he considered somewhat interesting, under the circumstances of their occurrence.

It will have been observed that they were both in consumptive patients, though neither of them in the most advanced stage. Both were walking about the house. They were in the same ward, and that a small one, containing only about ten beds.

There was a remarkable similarity in the symptoms and course of the disease in both. The most striking phenomena were the excruciating and almost unsupportable pains, especially in the small of the back, the great frequency of the pulse, the universal dark-red suffusion of the surface, somewhat punctated, and interspersed with petechiæ, the injected conjunctiva, the total absence of delirium or stupor, and the unexpectedly sudden death. In both the fatal issue occurred within the second period of 24 hours; one living 42 hours, and the other, who was further advanced in phthisis and weaker, only about 30 hours. On examination after death, rigor mortis was found wanting in one and defective in the other; there was in both universal congestion of the cerebral and spinal vessels, congestion also of the lungs, and a fluid or semifluid state of the blood; the substance of the brain and spinal marrow was much softened, so that in one the brain placed upon a plate and deprived of the dura mater, fell down into an almost formless mass, and the spinal marrow at near its lower extremity was almost diffluent. Here were the obvious features of a most malignant febrile affection. What was its precise character?

Only three febrile diseases were prevailing at the time which had any bearing on these cases, scarlet fever and small pox, out of the house, and erysipelas in the hospital, of which, however, there were only a few cases, and none in the same ward.

These patients had no communication, so far as was known, with any one out of the house. No case of smallpox had been admitted within the wards. One case of scarlet fever, in a seaman, had been received into the Hospital, but he was placed in a separate house, at a considerable distance from the main building. Between twelve and thirteen days intervened between the termination of the first case and the occurrence of the second.

The idea of malignant *cerebro-spinal meningitis* suggested itself;

but the absence of delirium or coma, and the want of tonic spasms, did not allow the disease to be considered as of that character, though there was obvious congestion of the brain and spinal marrow, and in one case there were signs of very slight exudation of coagulable lymph.

The diseased state of the blood from the beginning, as evinced by the petechiæ, red and turbid conjunctiva, and purplish hue of the surface, indicated that some poison had been admitted into the system, through which that fluid had become depraved.

Upon a comparison of these facts, Dr. Wood said that it appeared to him most probable that they were cases of malignant scarlet fever. There was something like the rash of that on the surface, though it made its appearance sooner after the commencement of the fever than usual. It is possible that one of the patients, both of whom had been permitted and encouraged to walk frequently in the grounds of the Hospital, had, unknown to the attendants, entered the house in which the patient was lying with scarlet fever, and might thus have contracted the disease. That the second patient received the disease from the first is highly probable. It is true that the period of incubation, namely, twelve or thirteen days, was longer than is usual in scarlet fever, and more in accordance with the variolous; but it was not so long as to be beyond the limits of a possible diversity from the normal standard.

The state of the skin in one of the cases strongly recalled to his mind an instance of malignant scarlatina which he had formerly witnessed in an adult male in this city, in which, as in the present case, the cuticle separated with a slight touch, as if the whole surface had been blistered.

The cases to which he had thus called the attention of the College, were of interest only in a pathological point of view. The treatment had probably had no influence, one way or another; nor is it likely that any measure which could have been adopted would have varied the result.

Dr. CONDIE related the following cases of

ABSCESS OF THE ILIAC REGION IN MALES.

He said, I have within the last few months been called upon to witness four cases of abscess, which, in many of their features were new to me, although they may possibly be familiar to other Fellows of the College.

In their general symptoms these cases were closely analogous to one another. All of them occurred in males, between the ages of eighteen and forty; persons surrounded by the comforts of life, and good livers. Two of the patients were slender in person and somewhat dyspeptic, and the other two were stoutly built and robust. In all of them the attack commenced with pain in the right inguinal region, at first in paroxysms, at irregular intervals. Subsequently the pain became more continued, and was aggravated by walking, by lifting weights, &c. Slight febrile symptoms followed, succeeded by loss of appetite, difficulty in walking, and finally, total inability to walk or even to assume an upright or sitting position. The pain increased in intensity, preventing the patient from sleeping night or day. To these symptoms succeeded the formation of a hard unyielding tumor, extremely tender upon the slightest touch. In one it was situated just within the spine of the ilium, outside of the abdominal canal and above the internal inguinal ring. In two cases it was deep in the groin and below the internal ring, and in the fourth immediately above the right pyramidalis muscle. At the end of three or four weeks the tumor became more prominent and circumscribed, and shortly afterwards fluctuation could be perceived. In one case, where the abscess was opened by the knife, a copious discharge took place of clear genuine pus, which exhaled a fetid smell. From this circumstance it was inferred that it originated low down in the pelvis near the rectum. In two of the cases an opening formed giving discharge to the matter without artificial aid. Recovery took place in all the cases, but very slowly, the patients remaining for a long time in a state of extreme debility. In the last case which has come under my notice, a tumor of extreme hardness remained for some time, but in the end gradually disappeared. Abdominal distension, but not amounting to tympanitis, and with more or less

tenderness, was observed in all of the cases. In none was there any reason to suspect a syphilitic taint. Two of the cases were seen by Dr. Wallace in consultation with me. These cases are of great interest, among other reasons because they present many of the marks of hernia, for which they might be mistaken by an inexperienced practitioner. Indeed, in one of them the mistake was actually made by the physician in attendance; and in another, which occurred in a patient eighteen years of age, the symptoms of strangulated hernia were strongly simulated; besides the painful tumor in the groin there were obstinate constipation, vomiting, and a small frequent pulse. Five grains of blue mass and three of extract of hyoscyamus were prescribed; and soon produced a free evacuation of the bowels, which were kept regularly open subsequently by small doses of an infusion of senna with the addition of sulphate of magnesia.

It is extremely curious that these cases should have occurred to me in such quick succession, while I had never before met with any precisely similar in the course of my professional career. As regards their treatment, I may state that leeches were used in two of the cases, to combat the inflammation, but in the two others they were not resorted to, as little or no benefit resulted from their use, and they interfered with local applications of greater efficacy; a strong solution of muriate of ammonia in camphor water, applied as a lotion, was found to produce the best effects. In the fourth case an ointment of the iodide of lead was used to promote resolution. Small and large doses of opium were administered by the mouth, to allay the intense pain and suffering which formed so prominent a feature in the disease.

Dr. GOBRECHT related the following particulars of a case of

PERFORATION OF THE APPENDIX VERMIFORMIS,

observed by himself:—

The patient, aged 21, a carpenter engaged in making and setting heavy joist, was muscular, of average height, and had been apparently in good health. He was not originally under my own care, but according to the statement made when I took charge of the case, at 11 o'clock on the night of Sunday, Feb-

ruary 10th, the first symptoms occurred at about 5 A. M., on the previous Thursday, consisting of abdominal pain, but no purgation, for which some "cholera medicine" was taken, but without relief, vomiting supervening at about 11 o'clock. During the day, and on Friday, the symptoms increased in severity, and on Saturday and on Sunday cups and poultices were applied to the abdomen, and internal remedies were employed, which, however, failed of their purpose; the pain continuing until Sunday noon, when it ceased suddenly and entirely, but the vomiting was unabated. For the first time since the attack the bowels were moved that evening by a clyster, but the passage, which was copious, had no fetid odor.

At the time when I first saw him, there was no abdominal tenderness, the belly being soft without tympanites, and the patient lying at length in the bed. Voice was good, respiration natural, pulse frequent, cool skin, moist clean tongue; but there was great general exhaustion and constant rejection from the stomach of a dark liquid like black vomit. I supposed from the detailed symptoms: 1. That he might have had enteritis resulting in gangrene. 2. Or internal strangulated hernia terminating in gangrene. 3. Or that he might have had peritonitis.

The obstinate vomiting and complete exhaustion were, however, the only symptoms to combat; accordingly the patient was placed on liq. calcis f ℥ss every half hour; broken ice to be held in the mouth ad libitum, and counter-irritation over the epigastrium was made by repeated applications of mustard cataplasms.

Milk punch and essence of beef were given freely, and flying mustard plasters were placed on the body and extremities.

The vomiting was thus checked, but not stopped; and the patient rallied. On Monday morning he was somewhat better, pulse a little stronger, voice good, mind perfectly clear; vomiting not so great; had rested a little during the night. Placed him on quiniæ sulph. gr. ij every second hour; and morph. sulph. gr. ¼ every 6 hours. Continued the stimulation and nourishment.

During the after part of the day, however, the favorable symptoms declined, the vomiting continued and the mind wan-

dered a little, but the patient would not admit that he was more unwell.

On Tuesday morning I found that his physical powers had been slowly failing since the previous evening, and when left perfectly quiet there was some disturbance of intellection, but he returned intelligible answers when addressed. It was evident that death would occur before many hours had elapsed, though not immediately, and being of perfectly clear mind it was thought best to apprise him of his actual condition, which was done in the gentlest manner possible. It was found that he had no apprehension of his extreme danger, and his life seemed to have been prolonged by the hope of recovery, for when informed of his real situation he asked anxiously, "Can you not *try* to do more?" then turned on his side, became restless, and had himself propped up in the bed; his mind wandered, breathing was labored, vision became indistinct; he was insensible to those around, and died at 10½ o'clock, within a half hour after being informed of his hopeless condition.

On examination 24 hours after death, cadaveric rigidity being complete, extensive peritonitis was discovered. The great omentum was thickened, vascular, and bound firmly to the right iliac region. All the coils of the small intestine adhered. The cul-de-sac between the bladder and rectum, by the agglutination of the sigmoid flexure, small intestine and upper fundus of the bladder, was completely shut off from the general peritoneal cavity, thus forming an abscess lined by very thick false membrane, containing more than a teacupful of purulent fluid. Several small circumscribed collections of purulent fluid formed in a similar manner were found in the vicinity of the ascending colon, which was drawn down and attached to the cæcum and appendix vermiformis so firmly that some force was required to separate them.

The removal of the colon revealed the appendix, which was quite capacious, perforated at the bottom of a large ulcer, situated at about one-third of its length from its extremity, the portions surrounding the ulcer being gangrenous. Just below the orifice of communication between the appendix and the cæcum, was found impacted, a seed or stone with its exterior much

softened, which appeared to be that of a large cherry or small plum.

At the time of death there seemed to have been no communication between the intestinal and peritoneal cavities; the adhesions of the perforated part to the colon preventing it.

The stomach contained a fluid similar to that vomited; there was no noticeable lesion of its parietes.

The mucous coat of the intestines was not involved in the inflammation, and contained, nearly throughout, only mucus colored by bile. The lower portion of the ileum and colon contained fæcal matter.

The bladder was empty.

The specimen presenting the lesion described, was exhibited by Dr. Gobrecht.

Several of the Fellows referred to similar cases that had fallen under their observation. Dr. GRISCOM mentioned one in which the foreign body was a watermelon seed; and Dr. KEATING referred to one reported by Dr. Meigs, where a collection of fig seeds in the appendix had occasioned the attack. A case was also reported by Dr. H. HARTSHORNE, in March, 1851, and another in April, 1845, by Dr. PEPPER. In the former, a mass of hardened fæces, and in the latter, a grape seed, was the offending body.

SIMPLE AND PUERPERAL PERITONITIS.

Dr. KEATING inquired whether cases of simple idiopathic peritonitis, or of the puerperal form had fallen under the observation of the Fellows? He had, himself, met with one of the former description.

Dr. WALLACE:—About three weeks ago I was called to see a young man at a boarding house. It was on Friday. On the previous Tuesday evening he was well. I am unable to state from observation what his symptoms were in the interval, but when I saw him his pulse was thready, and his abdomen distended, but free from any spontaneous pain. He had been sitting up by the stove because he felt chilly. On the same evening he died.

Examination *post-mortem* revealed the existence of intense and general peritonitis. Indeed, the whole of the parietal as well as the visceral layer was inflamed, the subserous cellular tissue injected, and the cavity of the membrane was filled with a sero-purulent liquid. The rapidity of the course taken by the disease had led me to suspect that it might possibly be due to some traumatic cause, but no perforation of the bowel or other similar lesion could be detected. I therefore regarded the case as one of idiopathic peritonitis.

In regard to the puerperal form of peritoneal inflammation, I may remark that I have met with two cases, and, as in one of them the course of the disease was somewhat unusual, and as I was able to obtain a *post-mortem* inspection of the body, a brief account of it may not be uninteresting.

On a Sunday morning the woman was confined, and her labor was quite regular in all respects. On the afternoon of Tuesday she had a slight chill and complained of pain in the right groin, which extended upwards, but it soon afterwards subsided. The secretion of milk was abundant, the skin moist, and the lochia but slightly diminished. In fact there was no symptom besides the pain alluded to. Pressure on the abdomen was not very painful. On Wednesday morning the breasts were full, and the general condition excellent; but the lochia were diminished, and the pain in the groin was more readily developed by pressure. At the fundus of the uterus, also, there was abnormal tenderness. The pulse was soft, perhaps twenty beats more frequent than before, but not excited. Leeches were ordered to be applied, and calomel with Dover's powder was given internally. Warm terebinthinate stupes were also used as an application to the abdomen. A few hours afterwards the pain had disappeared, but a state of collapse had ensued with sunken countenance, frequent pulse, &c. In the evening the pulse rallied and beat 120 a minute. The pain, however, returned, and a renewed application of leeches was thought advisable.

On Thursday evening the pulse reached 170, but it afterwards declined, and the patient died on Friday night.

I was struck by the extreme mildness, in this case, of all the symptoms which are most characteristic of puerperal peritonitis, and believed that its termination would be favorable. But

from the time when the leeches were applied, the countenance changed, and all the evidences of a mortal issue developed themselves.

An examination was made after death. The right ovary was covered with lymph, and filled with small and separate collections of pus; its tissue was readily torn, it was even less firm than a clot of blood found in the cavity of the uterus. This latter had no offensive smell. The left ovary was highly congested, and the corresponding Fallopian tube was of a chocolate color. There was no disordered condition of the uterus, and only *slight* peritoneal inflammation of its serous investment. But all the rest of the peritoneal membrane was intensely inflamed, and there was a large amount of serum, lymph, and pus in the cavity.

An interesting question presents itself: when did the ovarian inflammation begin? Did a condition exist previous to labor which tended to produce the subsequent disorganization? I rather am disposed to believe that it dated from the time of the chill, and I also suspect that the leeching, performed when it was, exerted an injurious influence. I am also inclined to think that in a similar case, it would be my duty to bleed with the first appearance of the local symptoms, with the view of checking or preventing a complete peritoneal inflammation, which, in this case, caused death, and which I believe did insidiously commence when the local symptoms first appeared.

Dr. KEATING:—In Dr. Wallace's case I cannot believe that such an amount of local inflammation and of such a grade, could have sprung up so suddenly, without producing more local and constitutional disturbance. I cannot account for such results as were exhibited in his case, except by supposing that a diseased condition existed previous to delivery, or that a latent inflammation had previously existed, and that the chill instead of announcing the onset of the disease merely indicated that it had already progressed to the formation of pus. I am confirmed in this belief by the fact that I have notes of three cases in which the patients had during the last weeks of gestation, complained of sharp lancinating pains over that region or that ovary, which was the identical spot in which the disease manifested itself after delivery.

It seems to me that during an epidemic of this fatal malady, it would be important for medical men to examine carefully the internal organs of generation of all puerperal women who might die during gestation; careful observations, under these circumstances, might prove whether or not this fearful poison had stealthily crept into the patient's blood before her delivery, and was only biding its time to destroy its victim.

So far from my experience confirming the propriety of copious venesection in these cases, I am more and more persuaded that those benefited by it are frank phlegmasiæ, the most amenable to treatment generally, and differing in every character from that fearful blood poisoning which prevails epidemically, and defies all treatment.

I cannot agree with the views just offered by Dr. Wallace in reference to bleeding in these cases.

In a recent case I was called in half an hour after the occurrence of the chill. The patient had been delivered forty-eight hours. I resorted to copious venesections, say f℥xx which immediately relieved the pain in the left iliac region, and reduced the pulse from 120 to 110 beats. The blood was neither cupped nor buffed. Immediately after bleeding, I gave a combination of opium and calomel, and applied warm fomentations to the abdomen. Prof. Hodge saw the patient, in consultation with me, three hours after; her pulse had already commenced to flag, and in six hours after, we had to resort to stimulants. I had never previously seen a case so soon after the attack, and never depleted so freely, and I can conscientiously affirm that I never saw a case sink so rapidly.

Dr. COATES:—Gentlemen should not blame themselves for the untoward event, in such a case as that related by Dr. Wallace; any more than in that of sloughing of the intestine, previously described by Dr. Gobrecht; nor does it follow that a contrary practice would have been more successful. The opposite of wrong, in matters of conduct, is not right, but another kind of wrong. It is notoriously beyond our power to prevent a fatal result in many such cases. I do not believe that it is possible, by bleeding largely, to insure or even afford any strong presumption of the cutting short of this disease.

I do not see the evidence that the occurrence of chills is necessarily indicative of the formation of pus in the case. Further, I am unable to discern the grounds in which it is supposed that the ovarian inflammation may not have existed previously to labor. The ovarium is an irritable part of the body, and it is very common for it to undergo great anatomical changes without the production of fever; even peritonitis does not always produce pain or fever. The cases, I believe, are easy of access; those which occur to my memory are from *Broussais's Phlegmasies Chroniques.*

Peritonitis may be induced by cold. In an instance under my own care, a case of rapid and mortal peritonitis was induced in a boy, by his being employed to clean out a bath-tub, in cold weather. Being fond of the cold bath, he remained a long time amusing himself amid the water. The marks of severe inflammation, in this case, lined the whole abdominal cavity and viscera, extending over the whole peritoneal surface of both sides of the liver; an appearance which I do not recollect having witnessed in any other instance. Where is the evidence that incidental and even apparently slight causes, an exposure to cold air and damp, for example, may not produce peritonitis after labor, when the susceptibility of the organs concerned in that function is, of course, extreme?

Dr. BEESLEY:—The case just related by Dr. Wallace is of a deeply interesting character; such a serious result following on symptoms apparently so little alarming. The difficulty is great of distinguishing such cases from those attended with similar symptoms, yet arising rather from irritation than inflammation.

I may, in elucidation, mention a case which I recently attended. A young and delicate married lady was delivered of her first-born, after eight months' pregnancy. She went on favorably, until the fifth day, when she was seized with a chill, headache, and pain in the left iliac region. I saw her about two hours afterward. She was lying on her back with her knees drawn up; complained of considerable pain and soreness on pressure. Abdomen somewhat tumid; had no stool since delivery; her nurse having been too ill to give her the needful attention. Her pulse was 110 and small, rising to 120 in the course of a few

hours. Lochia free and milk abundant. She had daily applied cleansing ablutions externally, but a putrid odor was evident.

I directed at once a purgative of calomel, jalap, and aloes, to be followed in four hours, if no stool, by an enema.

The neutral mixture with elixir of opium was also given about every two hours, and warm stupes over the abdomen. Considerable relief was experienced in her feelings after the second stool, but the abdominal tenderness though lessened, continued until the third day, and the pulse was above 100 for two or three days longer. On the second day Dover's powders, in four grain doses every four hours, were substituted for the elixir of opium. Perspiration came on gently and was kept up by this treatment, and my patient was soon convalescent.

In the early years of my practice, I adopted the plan recommended by Dr. Dewees, and bled and purged freely in such cases, and I regret to say, with not that success I desired. But for the last eight years I treat them differently, seldom taking any blood from them, unless the pulse is full and strong, and then rarely more than 16 to 20 oz.

I usually commence with from 12 to 15 grs. calomel, with two grs. of opium, and follow up with four grs. of Dover's powders, every four hours, neutral mixture every two hours, and flannels wrung out of warm water to the abdomen, covered with silk oil-cloth and dry flannel. I occasionally use some laxative or an enema to aid the calomel, but generally find that two or three stools of a dark color appear without their assistance, in twenty-four hours. All of these cases which I have seen from the commencement have recovered. Where I suspect putrid blood remains in the uterus, I occasionally use, I think with great advantage, injections of warm water into its cavity, by means of a metallic pipe introduced along the finger into the os uteri, from a glass syringe.

I fear that a poison introduced into the circulation from putrid matters may induce or aggravate the symptoms, and where these appear threatening a few days after delivery, I have seen no evil, but, on the contrary, favorable results from the practice.

Dr. GRISCOM:—I do not feel quite satisfied that the use of the

syringe which has been described is altogether free from danger. In some *post-mortem* examinations of the recently delivered uterus, I have found the Fallopian tubes large enough to admit the little finger, and therefore consider that the operation referred to might cause liquid to be thrown into the peritoneal cavity.

In reference to large bleedings in the disease under consideration, my experience is adverse to their employment. In two cases which occur to my mind, the attending physician bled so as to induce a completely anemic state; but both patients died.

Dr. BEESLEY:—The degree of openness of the Fallopian tubes after death, is no evidence, to my mind, that they are open during life, and soon after delivery. Were they in that condition, we should have two streams thrown into the cavity of the abdomen, when the uterus acted on fluid blood, at the time that its os is closed, or filled up with a coagulum.

Dr. CONDIE:—During a practice of thirty-nine years, I have seen enough of puerperal fever to strengthen my adherence to the belief, confirmed now by the conclusions of obstetricians in every part of Europe, and by the majority of those in our own country, that bleeding in this disease is altogether mischievous. It should never be forgotten that when the disease prevails, epidemically, the majority of patients will in general die, whatever may be the plan of treatment pursued.

If the views entertained by our Europen brethren are correct, puerperal fever is not a local disease, but a blood disease. Acute peritonitis may occur in the puerperal state and be cured by bleeding, but of genuine puerperal fever I defy any one to cure one case out of ten by antiphlogistic remedies. The only treatment of this disease, which can boast of any degree of success, is that which consists mainly in the use of the muriated tincture of iron. It has unfortunately happened that diseases of very dissimilar character and demanding very different plans of treatment, have all been classed under the one general denomination of puerperal fever, merely from the fact of their occurring soon after parturition.

In regard to the suggestion that clots retained in the womb

and there becoming putrid may occasion the disease in question, I would remark that in this manner typhus, but not true puerperal fever, may be generated. Nor do I believe that the removal of retained clots by injections thrown into the cavity of the uterus would prevent the development, or retard the fatal issue of genuine puerperal fever for a single hour. Besides, the danger of throwing an injection into the peritoneal cavity is a very serious one, for experiments made in France have shown that such injections are liable to pass from the uterus through the Fallopian tubes into the peritoneal cavity.

As regards the mild treatment recommended under the circumstances pointed out by Dr. Beesley, I fully admit its propriety. Indeed, it was but yesterday that a case occurred to me, presenting the symptoms alluded to, and I obtained a similar result, by adopting the same simple plan of medication; cases such as these, however, cannot be considered as even mild attacks of puerperal fever.

The question at present of interest to us is, does idiopathic erysipelas now prevail in any part of the city simultaneously, with puerperal fever? I have seen several cases of the former disease myself, in the lower part of the city, and have been informed that both it and idiopathic peritonitis have been observed by other physicians in the same neighborhoods.

Dr. HENRY HARTSHORNE mentioned that he was attending, at the present time, a woman in the southwestern part of the city, recovering from symptoms ordinarily considered those of puerperal fever, after having been *bled twice*. He alluded to it because a majority of the testimony, this evening, had been against bleeding in puerperal cases. The amount of blood taken in this case was moderate, ℥xij the first, and ℥xvj the second time; and Dr. H. believed that the treatment which affords the best hope of cure in the greatest number of cases, is what we may designate in one word, as the moderate treatment: in proportion to the symptoms of the case. Bleeding, calomel, and opium; purgation and blistering, all aided in the treatment of the patient alluded to, who was affected with what, from Hospital experience, Dr. H. should have considered very serious symptoms; but none of these remedies were carried to an *extreme* point.

While recognizing, with Dr. Condie, the existence of several pathological states under what we commonly call "puerperal fever," *e. g.* simple peritonitis, phlebitis, pyæmia, and epidemic or endemic puerperal fever, with or without peritonitis as a symptom, Dr. Hartshorne could not yet surmount the difficulty of distinguishing these in all cases, and especially at the time when it is most important, during the first day of the disease. He believed that we rarely have cases in which one of these conditions (unless it be simple peritonitis), is isolated altogether from the others, so as to present unmistakable signs at an early stage. We see a resemblance in this, to erysipelas, in which the constitutional and local elements of the disease unite; sometimes the eruption, and sometimes the general disorder being prominent, and with this difference the treatment must vary essentially.

ETHERIZATION IN PUERPERAL CONVULSIONS.

Dr. GRISCOM said: I have recently met with a case of puerperal convulsions, which was one of great interest to me. The patient was a corpulent young woman, pregnant with her second child. She was suffering under general anasarcous swelling, and experienced vertigo occasionally. While dressing her hair she fell down in violent apoplectic convulsions. Her pulse was full and rapid, and being unable to bleed her, I took sixteen ounces of blood from her head by cups, and the same quantity by leeches. There was no evidence of labor having begun. As the patient still remained unconscious and the convulsions were recurring with fearful violence, I applied chloroform as a rubefacient to the spine and also to the epigastrium, and being unwilling to employ this remedy by inhalation, I resorted to ether. After its exhibition the convulsions became less frequent and less violent, labor set in, and a living child was born. The mother recovered. During the seventeen hours of the attack, convulsive paroxysms recurred about every twenty minutes.

Dr. WOOD remarked that he had been recently examining the results of the use of chloroform as an anæsthetic agent, and that he had not met with a single case in which it had proved fatal, when used in midwifery or for a medical disease.

INDEX.

Air-passages, foreign bodies in, 319–330
Alum as an emetic in cases of narcotic poisoning, 47

Bache, Dr. F., his case of spontaneous dislocation of the eye, 423
Bell, Dr., on mercury latent in the system, 410
Benzoic acid in diabetes, Dr. Rand, 404–408
Biddle, Dr., on use of iodide of potassium in lead-poisoning, 421
Bloodletting, Dr. Samuel Jackson on, 148–160
Brinckle, Dr., death of, 49
——— resolutions respecting, 49
——— biographical notice of, 291–294
Building fund, report of the trustees, 336

Calomel, use of in diseases of children, 131–144
Cannabis indica in tedious labour, 43
Censors, report of, 287, 422
Cephalic version in case of shoulder presentation, 414–417
Chapman, death of, 42
——— resolutions respecting, 42, 62, 63
Cholera, Dr. Gilbert on, 279–283
——— Dr. Green's case of, 211, 212
——— inquiries respecting, 294–299
Churchill, Dr. Fleetwood, communication from, 93
Cinchonia, sulphate of, Dr. Thomas on, 430–438
Coates, Dr., on achillea millefolium, 334
——— on Cornus Florida, 440
——— his case of tedious labor, 43
——— on prussiate of iron, 439
——— on treatment of fractured thighs, 446
Cod-liver oil in consumption, 210
Columbia, resolutions respecting, 313
Committee of publication, announcement of, 355
Committee, library report of, 426
Condie, Dr., on foreign bodies in air-passages, 329
——— ——on effect of iodine on mercury, 411
Copper, effect on boiling water, 412
Cornus Florida, 440

Delegates to American Medical Association, election of, 163, 342
Diabetes, benzoic acid in, 404–408
Drake, Dr. Daniel, biography of, 6

Emlen, Dr., his biography of Dr. Brinckle, 291
Erigeron Philadelphicum, Dr. Wilson on, 330
Ether, influence of on nervous centres, 331–334

Evans, Dr., on effect of iodine on mercury taken into the system, 411
Eye, spontaneous dislocation of, 423
—— extrusion of, Dr. Gilbert, 423

Fellows, election of, 214, 288, 336, 422
———— admission of, 115, 263, 269, 291
Fracture of radius, Dr. Neill's case of, 266, 267
———— lower end of radius, 210, 211
———— acetabulum, case of, 267, 268
———— thigh, Dr. H. Hartshorne's mode of treating, 441–445
———— Dr. Jackson's remarks on, 445
———— Dr. Coates' remarks on, 446
———— the leg, Dr. Neill's mode of treating, 419, 421

Gilbert, Dr., his case of spontaneous dislocation of the eye, 423
———— on cholera, 279–283
Greene, Dr., his case of cholera, 211, 212
Griscom, Dr., on iodide of potassium in membranous croup, 164
———— his case of medullary cancer, 126–128

Hartshorne, Dr. H., on influence of ether on nervous system, 331–334
———— on effects of copper boilers on contained water, 412
———— his mode of treating fracture of the thigh, 441–445
———— on cholera on board of ship Tonawanda, 264
———— on meningitis, 342–351
Heart disease, Dr. Wistar's case of, 398–404
Hollingsworth, Dr., on putrefaction of animal substances, 283–286
Humerus, case of fracture of, 315–318

Intestinal perforation, Dr. Wood on, 338–340
Intussusception, Dr. Wood on, 340
Iodide of potassium in membranous croup, 164
———— effects of, on mercury latent in the system, 409
———— effects of, on lead-poisoning, 421
Iodine, effects of on mercury latent in the system, 409

Jackson, Dr., on *post-mortem* discovery of pure mercury, 412
———— his case of foreign bodies in air-passages, 329
———— on fractures of the thigh, 445
———— on Cornus Florida, 440
———— on effects of iodine on mercury latent in the system, 411
———— Dr. Samuel, on Dr. Griffith's habit of bleeding in yellow fever, 270–279
———— on prussiate of iron, 439
———— on bloodletting, 148–160
Jewell, Dr. Wilson, appointment of, 421
———— on fever at South Street wharf, Phila., 54–62, 64–91, 116
———— on mortality of Philadelphia, 446
———— on yellow fever in Philadelphia, 116–125

Lactine as an article of nutrition, 48
La Roche on yellow fever in Philadelphia, 214–261
Librarian, announcement of, 93, 413, 429
———— report of, 409, 420
———— election of, 337
Library, donations to, 64, 214, 263–5, 289, 300, 319, 334
———— committee, election of, 337
———— report of, 42

Library, condition of, 342
Liver, fatty, degeneration of in yellow fever, 92

Mason, Dr., his case of rupture of the uterus, 300–310
Medullary cancer, Dr. Griscom's case of, 126–128
——————— Dr. Morris's case of, 128–131
Meigs, Dr. C. D., his biographical sketch of Dr. Drake, 6
——————— on dilation of os uteri, 341
——————— on alum as an emetic, 47
Membranous croup, Dr. Wallace's case of, 265, 266
Menstruation, anomalous case of, 160
Meningitis, cases of, 342–351
Meteorology and epidemics, annual report on, 167–209
Moore, Dr. J. Wilson, on yellow fever, 95–97
Morbus Coxarius, Dr. Neill on, 212–213
Morris, Dr., on use of benzoic acid in incontinence of urine, 408
——————— on Dr. Hamilton's essay, 446
——————— on sulphate of cinchonia, 439
——————— on fractures of neck of femur, 116
——————— his case of fractured humerus, 315–318
Mortality, tables of, for 1853, 176–209; for 1854, 364–397

Neill, Dr. J., his operation for ruptured uterus, 300
——————— on morbus coxarius, 212, 213
——————— on pharyngeal orifice of Eustachian tube, 92, 93
——————— on *post-mortem* discoveries of mercury, 411
——————— on treatment of fractured patella, 93–95
——————— his cases of fracture of radius and acetabulum, 266–268
——————— apparatus of, for fractures of the leg, 417–421
——————— his case of strangulated bowel, 330

Officers, election of, 41, 287, 422

Page, Dr., on effect of iodine on latent mercury, 410
——————— on Cornus Florida, 440
Patella, fracture of, case of, 93–95
Patterson, Dr. H. S., resolutions respecting, 263
Pennsylvania Hospital, yellow fever in, 97
Penrose, Dr., on cephalic version in cases of shoulder presentation, 414–417
Pepper, Dr., on foreign bodies in air-passages, 319–330
Peritonitis in typhoid fever without intestinal perforation, Dr. Wood, 351–353
Philadelphia, decrease of deaths in 1855, 446
Procidentia uteri, case of, 161–162
Prostate, enlarged, case of, 49
Prussiate of iron, Dr. Jackson on, 439
——————— Dr. Coates on, 439
Publication committee, report of, 6, 49, 115
Putrefaction of animal substance, 283–286

Rand, Dr., on benzoic acid in diabetes, 404–408
——————— on smallpox in Philadelphia, 447
——————— on increase of smallpox in 1855, 447
Renal abscess, Dr. R. Thomas's case of, 311, 312
Rupture of the uterus, Dr Mason's case of, 310
Ruschenberger, Dr., his report on meteorology and epidemics, 167–209, 355–387
——————————— his election to secretaryship, 290

Smith, Dr. A. Clarkson, presentation of his letter, 319
——— H. H., on fracture of the radius, 210, 211
Stillé, Dr. Moreton, his death announced, 428
——— resolution respecting, 429, 429
Stocker, Dr., on yellow fever in Southwark, 97–114
Strangulation of bowels, Dr. Neill's case of, 330

Thigh bone, case of united fracture of neck, 115
Thomas, Dr. R. P., his case of enlarged prostate, 49
——— his case of renal abscess, 311, 312
——— his case of anomalous menstruation, 160
——— on Cornus Florida, 440
——— on sulphate of cinchonia, 438
——— his case of ruptured heart, 424
——— his case of procidentia uteri, 161, 162
Trustees of building fund, report of, 336
Typhoid fever, Dr. Wood on, 165–166

Uterine hemorrhage, Dr. Yardley on, 341
Uterus, rupture of, Dr. Mason's case of, 300–310

Vaccination, case of, 213

Wallace, Dr., his case of vaccination, 213
——— membranous croup, 265, 266
Wilson, Dr., on Erigeron Philadelphicum, 330
Wilcocks, Dr. Alex., resignation of, 421
Wister, Dr., his case of disease of the heart, 398–404
Wood, Dr., on benzoic acid in phosphatic urine, 408
——— typhoid fever, 165, 166
——— curability of intestinal perforation in typhoid fever, 338–340
——— death in typhoid fever from intussusception, 340
——— peritonitis in typhoid fever, 351–353

Yardley, Dr., on arresting uterine hemorrhage, 341
Yellow fever in Philadelphia, 116–125, 214–216
——— Dr. J. Wilson Moore on, 95–97
——— in Pennsylvania Hospital, 97
——— in Southwark, 97–114
——— malignant character of, 114

41B
407